M18420


22501442784

Digitized by the Internet Archive
in 2014

https://archive.org/details/b20400913

85795

VENTNOR

AND

THE UNDERCLIFF

IN

CHRONIC PULMONARY DISEASES.

BY

JAMES M. WILLIAMSON, M.D. Edin.,

MEMBER OF THE CLINICAL SOCIETY OF LONDON;
MEMBER OF THE PATHOLOGICAL SOCIETY OF LONDON;
SURGEON, FORMERLY RESIDENT MEDICAL OFFICER TO THE ROYAL NATIONAL HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, VENTNOR, I.W.

SECOND EDITION.

LONDON:
BAILLIÈRE, TINDALL, AND COX,
20, KING WILLIAM STREET, STRAND.
[PARIS AND MADRID.]

1884.

21670

Wellcome Library
for the History
and Understanding
of Medicine

M18420

WELLCOME INSTITUTE
LIBRARY

Coll.	welMOmec
Call No.	WF600
	1884
	W73v

TO

THE RIGHT HON. SIR LAWRENCE PEEL,

CHAIRMAN OF
THE BOARD OF MANAGEMENT OF
THE ROYAL NATIONAL HOSPITAL FOR CONSUMPTION AND
A GREAT BENEFACTOR OF THE INSTITUTION,

THIS LITTLE VOLUME IS

GRATEFULLY AND AFFECTIONATELY

Dedicated

BY

THE AUTHOR.

PREFACE TO THE SECOND EDITION.

The first edition of this little publication having, for some time past, been out of print, the writer has been repeatedly pressed to issue a second. In preparing it, advantage has been taken of the opportunity to adopt the advice of some medical friends, and to present a somewhat more extended view of the subject. The climatic peculiarities and natural features of the Undercliff have been touched upon; but every effort has been used to make these particulars as brief as is compatible with utility. It is hoped that the new matter which has been introduced will not detract from the more strictly medical character of the information intended, as is stated in the introductory chapter, to be conveyed in these pages.

Southcliff Cottage,
Ventnor, Isle of Wight,
December 1*st*, 1883.

TABLE OF CONTENTS.

CHAPTER		PAGE
I.	Introductory	1
II.	The Undercliff and its Climate	11
III.	Preliminary Summary of Cases	34
IV.	Of Phthisis	39
V.	Of Asthma	66
VI.	Of Chronic Bronchitis and Emphysema ...	73
VII.	Of Chronic Pleurisy and Empyema	80
VIII.	Summary	84
IX.	On Certain Incidental and other Conditions ...	88
X.	Concluding Remarks	98

VENTNOR AND THE UNDERCLIFF

IN

CHRONIC PULMONARY DISEASES.

CHAPTER I.

INTRODUCTORY.

The subject of climate may be taken up and studied from various points of view. For example, if the inquirer be a student of geography, he enters upon it from its mathematical side, accurately carrying out his investigation with scientific preciseness. The botanist, again, or the student of natural history, approaches the question in its important bearings on all of the different forms of vegetable, or of animal life existing upon the earth. Apart from those just mentioned, there are the students of public health and the medical advisers of the sick. They concern themselves with the influence of climate upon the health, and the diseases of mankind; and it will be admitted that this is a branch of the study which yields nothing to any of the others on the score of practical utility.

When we endeavour to estimate the benefit mankind

may derive by prosecuting the study of climate from this last aspect, it is not surprising that the attention bestowed upon the subject has by no means been only of recent date. From times long past men have had in their minds notions, of a more or less defined character, respecting the relations which subsist between climate and health on the one hand, as distinguished from those obtaining between climate and disease on the other hand. We can easily imagine how such ideas would arise. At one time certain climates would at first be suspected, and afterwards proved, to be virtually the causes of particular maladies. This relationship of cause and effect having been made out, it would naturally follow that a search should be instituted for other climates which would exert a beneficial, perhaps a curative, influence. Developing stage by stage as fresh facts were gathered from experience, the belief in the existence of a curative as well as a causative connection between climate and disease would begin to establish itself. In this way change of climate came to be regarded, long before our time, as a therapeutic agent of no mean importance.

It is probably true, however, that of all their therapeutic agencies, medical men find change of climate to be the most difficult to dispense to their patients as they could wish. Medicines can be accurately weighed, and the dose well calculated; hygienic rules may be carefully drawn up and rigidly

enforced. But where can invalids be sent with the confident assurance that they will find, in a given place, only those closely defined conditions of climate which are supposed to be adapted to their maladies? This uncertainty seems insupportable to some minds. No doubt it was partly on account of it that one writer ventured to express the opinion that the scientific selection of a climate was nothing but "a fond phrase." It may be quite true that possibly the invalid may fail to obtain an average sample of the climate of a health-resort, at the particular time of his seeking it. This possibility may, indeed, remove from the experiment the elements of mathematical accuracy. Nevertheless may we not reasonably claim to move on scientific lines if we read correctly the climatic indications proclaimed by the disease, and then diligently search for a locality where the average climate is known to supply these indications? The difficulty, after all, is merely relative. Some may doubt in which respect we are the more secure: in the correctness of our knowledge as to what the climatic requirements in certain diseases really are; or in our ability to procure specific conditions of climate for a given case. At the same time, it is quite clear that these are the two great essentials in endeavouring to select a climate for an invalid scientifically. The more extensive and exact our knowledge can be made on such matters, the more satisfactorily and successfully will the medical man be able to perform his duty to his patients in this respect.

Now, if we turn our attention to one of these two requirements, and look around us for places possessing certain broadly defined conditions of climate, we are at once confronted with a large array of health-resorts. The claims of these resorts are in some instances old established, in others quite recent. In judging of them, and in forming an estimate of the character of their climates, it is quite indispensable that we should have before us trustworthy accounts of the meteorology of the districts. These reports must tell us about the temperature, the moisture of the air, the amount and frequency of the rains, and the prevailing direction and intensity of the winds. We must also be made acquainted with the nature of the soil. Without all this knowledge, it would never be possible to discriminate between various climates, or to arrange them into groups and classes according to their analogies or their differences. As a matter of fact, these places of resort have, almost without exception, contributed information on these points. Although with regard to some of the newer health-stations the data cover too short a period to allow of fair averages being struck, there can be no doubt that, so far as concerns the most important places, we are amply supplied in this respect. The latter can produce for our inspection meteorological observations which have been systematically and conscientiously recorded for long and continuous periods of time. Under such circumstances, classification is not a matter of over-

whelming difficulty. The records upon which the classification has been made are, in many cases, now so voluminous that the averages obtained from them may be accepted, as regards the places, to be final and conclusive for the purpose. Such averages are more likely to be confirmed than altered by the observations made in the future. Always excepting the natural and inherent uncertainty of climate, therefore, we appear to have on our list of health-resorts a large number of places which supply, more or less perfectly, certain definite climatic conditions. This number is increased year by year by new claims; and we have before us the prospect that, ere long, the choice will be so extensive as to be embarrassing.

Leaving our search after health-resorts and their climates, we have seen that the other necessary factor in attempting to select a climate scientifically for an invalid is that we must correctly know the climatic requirements of a disease; if, indeed, any help of the kind is likely to be of service in its treatment. Now, it is very much easier to record meteorological observations than to arrive at the truth about this question. The inquiry is so beset by the consideration of points, numerous and often conflicting, some of them based upon matters still in dispute, that opinions as to what these requirements are in some diseases will probably not be clearly formed for some time to come. Repeated changes of ideas on this subject have contributed to the rise and fall of many a health-resort. We often

hear it said that there is a fashion in health-resorts, as in everything else. They form another illustration of the old saying of Seneca, "As the world leads, we follow." To some extent, at all events, this may be true. In consequence of high and perhaps extravagant praise from influential quarters, a tiny fishing hamlet speedily becomes a little town, and develops all the appendages and attributes of a popular health-resort. Its decay is as rapid as its growth. The voice of the public turns against it, or its early and enthusiastic patrons cease to remember it. Whether from sheer popular fickleness, or from the difficulty of access to it; whether from dislike to it or its surroundings, or from medical disappointment in its climate, the place goes out of fashion, as we say. But is there not often in all this another reason than fashion? Do not some of these deserted "resorts" serve to mark the fact that the medical world has rapidly changed its views about the treatment of some affections; perhaps, even, that it has betrayed vacillation, and too ready a change of front, in a hurried endeavour to promote a violent reconciliation between old facts and fresh theories? At any rate, they help to remind us that we must not adapt our views too precipitately to altering ideas in pathology, or to novel theories about the causation of disease.

Yet, on the other hand, one must not be too severe in condemning this changeableness. There are some extenuating circumstances to be pleaded in excuse for

it. Some varieties of disease are so obstinate and unyielding, in spite of all we can do, that no one can wonder at doctors continually casting about for fresh fields and pastures new, even in matters of climate. In such cases the old measures and plans of treatment may have been tried with disappointing results. New resources are anxiously sought for by the medical attendant, whose anxieties are increased by the pressure brought to bear upon him by the patient or the friends; and no person is more willing, indeed more eager, to try every new thing than the sufferer from a chronic and intractable disorder.

This unsettled tendency is not a very safe state, because it is apt to spread and involve former opinions which may have been well grounded. We become liable to lose confidence in old and well-tried anchorages. To prove this, one has only to watch the continual birth, through the medical and lay press, of a succession of new health-resorts, each succeeding place distancing its predecessors in its claims. There can be no doubt that, if some of our older and more important resorts are to preserve public confidence in their real usefulness, it is becoming every year more necessary that they should produce some proof of it. The proof must be more practical or at any rate, medically speaking, more tangible, than bare meteorological tables. We have a right to look to these health-stations for a sort of medical account; they must show how far they have helped

patients and doctors to carry out the end in view, namely, the relief or cure of disease. An investigation of this kind cannot be too thorough. Its benefits will be twofold: it will make the capabilities of the climates themselves stand out more clearly; and it will assist in confirming, or reforming our present ideas as to the climatic indications for treatment in certain diseases. These are important objects, and medical men who reside in our chief *sanitaria* might find congenial occupation in collecting and publishing their results.

In order to carry out such an investigation, it is very necessary to have some satisfactory basis; and there is no field for observation like an hospital. It will both stimulate and facilitate the work. Experience is much more easily accumulated in the regular routine of hospital work than among cases which are surrounded by all the trammels of private practice. Moreover, just as there are difficulties and hindrances in carrying on clinical work in the former branch of practice, which do not exist in the latter, so also do we labour under similar disadvantages in attempting to preserve exact and written records of cases met with in an extensive private practice. It appears, therefore, that distinct advantages accrue to a health-resort from the possession of an hospital or institution founded for the treatment of those particular maladies which the climate of the neighbourhood is believed to benefit.

We shall now see how these general statements apply to the district with which we are at present concerned. The Undercliff of the Isle of Wight, including Ventnor, has now been in high repute as a resort in pulmonary disease for a great many years. Its meteorology has by this time been well and fully recorded. Yet until the first edition of this little publication appeared, no account had been presented for thirty years of local medical experience in such cases. To some extent this may be ascribed to the fact that, until of recent years, the Undercliff was entirely without an institution for the treatment of diseases of the chest. Probably the absence of a nucleus or basis for the registration of cases militated against other systematic records being tabulated, or even preserved. Fortunately, this want has been made good. At the Bonchurch Convalescent Home of the Royal Hampshire County Hospital, to which the writer has been medical officer since its commencement, a large number of patients have been assisted in their convalescence from pulmonary as well as from other affections. There has also been established in Ventnor the St. Catherine's Home for Advanced Cases of Consumption. But the chief institution is the Royal National Hospital for Consumption and Diseases of the Chest, founded by the noble exertions of Dr. Arthur Hill Hassall, who was formerly a resident in Ventnor. It is the largest seaside home for diseases of the chest in this country. This

magnificent hospital will hereafter be described in fuller detail; but it is sufficient to point out that the reliable and valuable facts which are being ascertained at these institutions, especially at the last mentioned, have a public interest so far as concerns the reputed usefulness of the climate of the Undercliff in pulmonary affections.

It was during my long and intimate connection with the Royal National Hospital for Consumption, as its resident medical officer, that I was enabled to gather a large number of observations on cases of diseases of the chest, and the course they ran under treatment in the Undercliff. Subsequent years of private practice at Ventnor have given me the opportunity to review and extend these observations. It will now be my endeavour to relate my experiences from both of these sources. As far as possible, this will be done by numerically tabulating cases of the main forms of chronic disease of the chest; but, on the general points, the conclusions will be drawn from my entire work among this class of patients. The intention in dealing with the climate of the Undercliff in these pages is to keep, so far as I can, to medical facts. It seems to be necessary, however, to begin by making some general remarks on Ventnor and the Undercliff, giving some account of the main features which characterize the locality and its climate. This will be done in the briefest possible manner in the succeeding chapter.

CHAPTER II.

THE UNDERCLIFF AND ITS CLIMATE.

Situation, etc.—The Undercliff of the Isle of Wight is a tract of land which extends for about seven miles along the southern coast of the island. It begins at Luccombe on the east, and reaches to the westward as far as Blackgang. A high range of cliffs and downs hems it in on its northern side, accounting for the name of the locality, and forming for it a great natural bulwark against cold. The southern boundary is washed by the waters of the English Channel. In the whole of England it would probably be impossible to find a more remarkable spot than the Undercliff, when we consider its geological structure, its picturesque and varied scenery, and its natural adaptation for affording that shelter from the vicissitudes of climate which so many invalids require. It owes its formation, as will presently be explained, to a succession of enormous landslips which must have occurred hundreds of years ago; and these landslips have given the ground all the beauty of a range of natural terraces. The terraces combine to form a southern

slope, which varies in breadth from a quarter of a mile to nearly a mile. It is spread out at the foot of lofty hills and cliffs, fully exposed to a wide sweep of open sky, and overlooking a magnificent expanse of sea. The principal aspect of the Undercliff is due south.*

The chief centre of the Undercliff is the town of Ventnor, which has now taken rank as one of the most favoured and most popular watering-places of the south of England. Ventnor is a growing little town, with a population of nearly six thousand. It has been of somewhat rapid growth. Forty-five years ago its population was not more than three hundred and fifty. In that well-known work, "Tomkins' Tour to the Isle of Wight," a two-volume book, published in 1796, the author passed over "the village of Ventnor" in a few lines. He says, "The neatness of the fishermen's cottages is remarkable, and their situation uncom-

* With regard to its precise aspect, the Undercliff may be divided into certain portions, which differ from one another in this particular. The largest and most important part lies between St. Catherine's Point and Dunnose, and its length is about five miles and a half. A line joining these two headlands would pass through Old Park at Niton, Steephill Castle at St. Lawrence, and the parish church at Ventnor—in fact, through the very heart of the Undercliff. Such a line would run due east and west, and would face exactly south. The eastern corner of the Undercliff, a strip of land three-quarters of a mile long, between Luccombe and Dunnose, faces south-east by east. The western angle of the Undercliff, again, has two exposures. One part, about half a mile of coast between St. Catherine's Point and Rocken End, looks a little south of south-south-west; while the other, nearly a mile long, between Rocken End and Blackgang Chine, faces west by south.

monly pleasant, being open to a full prospect of the sea in front, and backed by woods and the high downs of St. Boniface." The situation of Ventnor, whether one views it from the land or the sea, is singularly beautiful. The delicate invalid, alive to his needs in the way of climate, appreciates at a glance the features, which adapt it in such a remarkable manner for a winter residence. It is, however, not very easy to form a just conception of the amount of shelter afforded by the downs by viewing the district from any point on land. No photograph conveys a just impression of it. One must inspect the configuration of the land from a boat at a little distance off the shore, before the natural protection can be properly realized. The beauties and advantages of Ventnor have been described over and over again in glowing terms by many writers of note—Lord Jeffrey, for instance, Lord Macaulay, John Sterling, Sir James Clark, and others. For our present purpose, Sir James Clark, as the author of that great English classic on the subject —"The Sanative Influence of Climate"—is the only one we need quote. This writer is generally quoted, it is true, in publications on health-resorts. My excuse for referring to his book is the very strong way in which he speaks of the Undercliff. Sir James Clark says, "The continuous range of high hills which separates this district [the Undercliff] from the rest of the island [the Isle of Wight] protects it most effectually from all northerly winds; while numerous

short ridges, projecting from the main range towards the sea, break, in a considerable measure, the violence of the south-west winds. The protection afforded by the northern barrier is greatly increased by the very singular and striking abruptness with which it terminates on its southern aspect. This in many places consists of the bare perpendicular rocks of sandstone; in others, of chalk, assuming its characteristic rounded form, covered with fine turf and underwood; but so steep as to justify the appellation conferred on the beautiful tract which extends from its base to the seashore. The defence afforded by this natural bulwark against northerly winds is, indeed, more perfect than anything of the kind with which I am acquainted in England; and the transition of climate experienced on descending from the exposure of the open and elevated down to the shelter of the Undercliff will remind the Italian traveller of his sensations on entering the Valley of Domodossola, after quitting the chilly defiles of the Simplon, in an autumn evening. You feel at once that you have entered a new climate; and the luxuriance of the vegetable tribes, which you find around you, proves that this impression made on the senses has not been deceitful."

Ventnor is about two miles from the eastern end of the Undercliff, which is at Luccombe. Bonchurch is situated between Ventnor and Luccombe, and is, perhaps, more completely protected by the hills than any other place in the district. The high road through

the centre of the village of Bonchurch skirts along the foot of downs, which here reach an elevation of 787 feet. This sequestered village is one of the oldest in the Isle of Wight. Peaceful and quiet, embowered amid trees, it is famous for its loveliness. Between Bonchurch and Luccombe stretches the celebrated Landslip. This is all on the eastern side of Ventnor. A mile and a half westwards from it we come to St. Lawrence, a village more open than Bonchurch, but admirably situated for health purposes. No other portion of the entire Undercliff is better fitted for the residence of invalids; and there can be no doubt that, in selecting for the Royal National Hospital for Consumption a site on the land between St. Lawrence and Ventnor, one of the very finest situations in England was secured.

We may now suppose ourselves to have traversed a tract of land about three miles in length, and representing about one-half of the Undercliff. It begins at Luccombe, and is occupied from east to west by Bonchurch, Ventnor, and St. Lawrence. This is the part which is most frequented by invalids, because it is the most sheltered. The heights of the different summits of the downs behind this portion of the Undercliff are given as follows :—

	Feet.		Feet.
Shanklin Down	772	Ventnor Down	732
Luccombe Down	726	Rew Down	600
Bonchurch Down ...	787	Wroxall Down	764
St. Martin's Down ...	686	Week Down	690

To the west of St. Lawrence, and extending as far as Blackgang, a distance of about four miles, we have the second portion of the Undercliff. The shelter in this part gradually diminishes after we pass St. Lawrence, and, although a considerable elevation is again attained at St. Catherine's Down, the height of the hills that screen the Undercliff is not so great along the western as at the eastern portion. Nevertheless, at the lower village of Niton, distant about five miles from Ventnor, and standing at almost precisely the same elevation above the sea-level as the middle of Ventnor, the protection is still considerable. The shelter is quite sufficient to make this little village a favourite resort for many invalids, who also enjoy its quieter and more rural life. It may be well to make a note of the different heights of the range of downs extending from St. Lawrence to the western extremity of the Undercliff.

	Feet.		Feet.
Behind Old Park ...	522	Behind Westcliffe ...	400
Behind Orchard ...	395	St. Catherine's Down ...	781

Soil.—The strange conformation of the land in the Undercliff at once attracts notice, and the locality has been a very interesting one to the geologist. The strata belong to the chalk formation, as, indeed, will be gathered at once from observing the smooth and verdant covering of the downs. The upper strata consist of chalk and chalk marl. Beneath is the firestone, consisting, according to Captain Ibbetson,

of upper greensand, chloritic marl, second bed of greensand, fossiliferous marl, and two alternations of malm and rag. This firestone is seen at every turn in the face of the cliffs, and forms a very striking feature. The galt lies next, a stiff blue marl or clay, and known locally as "blue slipper." The action of moisture on this stratum has paved the way for all the landslips which have occurred in the neighbourhood. The galt covers the greensand, which Mantell describes as a triple alternation of sand, sandstones, and limestones, with dark, stiff clays. To these different strata of the chalk formation, then, the terraces of the Undercliff owe their origin. The ground, in short, is formed of fallen masses of chalk, firestone, and galt, tumbled over one another, and heaped up in huge masses as they broke away from the Uppercliff. It will be seen that the soil, which forms the surface and supports such a luxuriant vegetation, is the detritus of this chalk and sandstone. A great characteristic of a soil of this kind, and one highly interesting in relation to the climate of the locality, is its great dryness. It is calculated to absorb quickly, and carry off speedily, all superfluous moisture, and, on that account, it assists in promoting a warm and salubrious climate.

Sunshine.—The southerly exposure of the Undercliff, and the mirror-like action of its sea-front, secure for it very marked advantages with regard to sunshine. That these advantages are greatly above the average

has been proved by observations taken by the sun-recorder. This instrument, it must be remarked, makes no record of many days which would generally be called sunny. It only tells us of the periods of bright sunshine; but, even in this, we have evidence that the district is unusually favoured. For instance, during 1881, the Undercliff enjoyed 154 more hours of bright sunshine than Kew; while in the following year, 1882, this difference was as much as 265 hours in favour of the Undercliff. The following tables are taken from the last two Annual Reports made by the Medical Officer of Health for Ventnor, who was indebted for them to Mr. W. E. Kilburn, of St. Lawrence. The tables record these comparative observations so clearly that I venture to introduce them here:—

COMPARATIVE STATEMENTS SHOWING RECORD OF BRIGHT SUNSHINE AT ST. LAWRENCE, ISLE OF WIGHT, AND KEW, FOR THE YEARS 1881 AND 1882.

1881.

	St. Lawrence.		Kew.	
	Hours.	Minutes.	Hours.	Minutes.
January	39	35	23	38
February	58	24	26	45
March	161	36	105	0
April	124	3	128	30
May	186	39	202	30
June	185	38	236	30
July	202	34	242	30
August	196	6	176	0
September	152	58	86	0
October	153	9	106	0
November	83	14	76	30
December	61	32	41	30
Total	1605	28	1451	23

1882.

	St. Lawrence.		Kew.	
	Hours.	Minutes.	Hours.	Minutes.
January	33	21	33	0
February	70	42	40	0
March	165	44	142	0
April	196	47	157	30
May	274	28	283	0
June	159	12	140	0
July	141	8	170	30
August	252	29	177	0
September	165	33	115	0
October	102	49	73	37
November	99	6	86	0
December	47	59	27	0
Total	1709	18	1444	37

An inspection of these tables reveals, first of all, the much larger amount of bright sunshine enjoyed in the Undercliff. But it shows another very important fact, namely, that the gain in sunshine was experienced during the half of the year in which even a slight gain is so welcome, that is to say, the six months from October to March. It is unfortunately impossible to adduce data extending over a longer period than two years, for it is believed that, prior to 1881, no systematic observations were ever made with the sun-recorder in the Undercliff.

Temperature.—Following the question of sunshine comes that of warmth and equability of temperature. It is desirable to make observations on this subject as simple as possible so as to be readily intelligible. I

draw my facts from Dr. Whitehead's exhaustive meteorological tables, which, covering the long period of forty years, are well entitled to form the standard work of reference on such matters for the district.

Let us first look at the comparative warmth of the climate during different portions of the year. I have calculated this information from the published tables to which reference has been already made. It is appended in a tabulated form, but no attempt has been made to contrast the conditions with those found elsewhere. Their very favourable character needs no comment.

TABLE SHOWING THE MEAN MONTHLY TEMPERATURES AT VENTNOR FOR FORTY YEARS.

Winter Months.		Spring Months.		Summer Months.		Autumn Months.	
	Fahr.		Fahr.		Fahr.		Fahr.
Dec. ...	43·30°	March	44·20°	June ...	59·15°	Sept....	59·78°
Jan. ...	42·02°	April...	49·38°	July ...	62·06°	Oct. ...	54·02°
Feb. ...	42·20°	May ...	53·67°	Aug. ...	62·58°	Nov. ...	47·03°

This shows that January is the coldest month at Ventnor; then come respectively in degrees of warmth, February, December, March, November, April, May, October, June, September, July, and, the warmest month in the whole year, August. It is important to note the comparative warmth of the winter months, and the comparative coolness of the summer months. Ventnor is, for England, a warm place in winter; but

the facts completely disprove a very widespread notion that it is a hot place in the summer.

Next in interest to the subject of average temperatures, and to the invalid by no means of secondary importance to them, is the average daily range; in other words, the equability of temperature. Dr. Whitehead finds that the mean daily ranges for the seasons have been as follows :—

TABLE SHOWING THE MEAN DAILY RANGE OF TEMPERATURES AT VENTNOR FOR FORTY YEARS.

Winter.		Spring.		Summer.		Autumn.	
	Fahr.		Fahr.		Fahr.		Fahr.
Dec. Jan. Feb.	7·10°	March April May	10·61°	June July Aug.	10·24°	Sept. Oct. Nov.	8·80°

Taking the entire year throughout, the mean daily range does not average more than 9·18°. This is a very different condition from that found in some of the mountain climates now sometimes recommended in certain forms of chest-disease. At such elevations, the daily range is much greater than those given above, and is not free from danger to some invalids.

Out of the forty years there were seven winters with little or no frost. Twice within the last twenty years there have been winters during the entire course of which the thermometer never fell to freezing point.

Rainfall.—The rainfall in the Undercliff is not

large. The Rev. Clifford Malden, Rector of St. Lawrence, recently published a table founded upon careful observations made by himself during fifteen consecutive years—1868 to 1882. The average annual rainfall during that period amounted to 31·74 inches. Following this average out according to months, the following table shows the mean monthly fall of rain during the fifteen years just mentioned:—

MEAN MONTHLY RAINFALL (FOR FIFTEEN YEARS) IN THE UNDERCLIFF.

	inches.		inches.		inches.
January ...	3·26	May	1·48	September ...	2·99
February ...	2·40	June	1·74	October ...	4·02
March ...	1·85	July	2·26	November ...	3·66
April ...	2·03	August ...	2·59	December ...	3·46

From this it appears that the heaviest rainfall takes place in the Undercliff in October; next follow respectively November, December, January, September, August, February, July, April, March, June, and, the driest of all, May. In addition to these facts concerning the amount of rainfall, some information should be given about the number of days on which rain fell. Mr. Malden has kindly tabulated statistics on this point for me from the fifteen years' observations already quoted. He finds that the average number of days on which rain fell in the year was 164.* It

* In a Table of Comparative Rainfalls at different Health-Resorts, published in a recent work on the Riviera, Ventnor is said to have an annual rainfall of 34·54 inches, and an average of 174·6 wet days in a

must be remembered that a record is made of every day on which one-hundredth of an inch of rain fell; but as that is an amount which might occupy only a few minutes, invalids must not imagine that every day enumerated was what is called a wet day. Moreover, the observations were only taken once in twenty-four hours, so that the rain on many occasions may have fallen not between morning and evening, but during the night. Future observers may give us some information on this last subject. The two points are important to invalids, however, who are in search of a place where as little hindrance from weather as possible may occur to prevent daily outdoor exercise.

The rainfall, we have seen, is not large. This being the case, and no large surfaces of inland water existing in the neighbourhood, the aqueous vapour present in the atmosphere must be to a very great extent derived from marine sources. There is good reason, indeed, to believe that the Undercliff possesses a much more truly marine climate than most other seaside resorts.

year. These are, however, calculated from only three years' statistics; and it will be evident from what is said above that they are considerably overstated, to the disparagement of Ventnor. But the same author's table serves to illustrate how utterly misleading many of these comparative tables are. For instance, his averages for Ventnor are drawn from observations extending over three years; those of Bournemouth for ten years; of Torquay for two years; of San Remo for ten years; and of Mentone for six months. The results of such unfair comparisons must be unreliable.

Prevailing Winds, and Ozone.—The meteorology of a district is well known to be intimately bound up with the prevailing direction of the currents moving in the atmosphere ; and, in the Undercliff, these air-currents are certainly not from the cold quarters. It has been calculated that south-westerly winds are twice as frequent at Ventnor as winds from the north-east. And even the winds coming from cold directions are mitigated in severity. There can be no doubt that north winds, crossing the Isle of Wight towards the Undercliff, must meet the first obstruction to their course in that long range of hills which stretches transversely across the widest portion of the Isle of Wight, about twenty miles, from Alum Bay on the west to Whitecliff Bay on the east. This range includes the following heights, beginning on the east :—

	Feet.		Feet.
Bembridge Down ...	355	Westridge Down	537
Brading Down	407	Newbarn Down	539
Ashey Down	424	Brixton Down	701
Mersley Down	413	Westover Down	667
Arreton Down	444	Brook Down	496
Chillerton Down	549	East Afton Down ...	415

Broken in force, to some extent, by this long natural barrier, the northern blasts next reach the downs behind and above the Undercliff, which attain an elevation, already noted, of nearly eight hundred feet above the sea-level. It is evident how much the terraces immediately under these lofty hills must be

protected. Such easterly winds as blow upon the Undercliff are not without some good effect. They undoubtedly have no small share in saving the climate from being as relaxing as that found in some parts of Cornwall and Devon. The prevailing winds of the district, however, are from the south-west. Even if we had not figures to prove this to be true, we should have demonstration of the fact by observing the direction to which the high and least-sheltered trees lean. This was remarked upon by J. Hassell, in his "Tour of the Isle of Wight," published in 1790. He says, "The vegetative effect which the southerly wind has on the trees, shrubs, and plants of this island is worthy of remark. Long before any of them arrive at maturity, through the prevalence of the wind from this point, they all incline towards the north, nodding their stately heads as if they set the chilling blasts of Boreas at defiance. In the valleys, where they are sheltered by the surrounding hills from every pernicious blast, they thrive with an astonishing degree of luxuriance."

Irrespective of their influence upon temperature, it is to be observed that these prevailing winds are the breezes which bring up most ozone into the district. The presence of abundant ozone in the atmosphere is justly considered an important matter in the case of health-resorts. The oxidizing and antiseptic properties of this gas are such that salubrity and ozone are, to a certain extent, believed to go hand-in-hand. Ozone,

moreover, is one of the chief properties of sea-air; a fact dwelt upon emphatically by Dr. Burney Yeo, in his excellent work on "Health-Resorts and their Uses." Now, it has been very correctly pointed out that no wind can blow over the Isle of Wight that is not in every sense of the word a sea-breeze; hence we receive ozone from every quarter. It was remarked not long ago, by a visitor to the place, that to live at Ventnor was like being moored twenty miles out at sea. If the island were smaller, the comparison might be quite applicable; nevertheless, it is probably true that no other place along the south coast of England so perfectly possesses a sea-air.

Salubrity.—When all the foregoing advantages of climate are taken into account, the reader will naturally expect to hear some evidence to show the favourable influence they exert upon the public health of the district. It is, therefore, satisfactory to point out that the Undercliff is a remarkably healthy place. To prove this, so far as regards Ventnor, we have only to refer to the annual reports of the medical officer of health for the town, especially those for the past two years, 1881 and 1882, the reports for which have been much more complete than previous ones. According to these statistics, and not reckoning the deaths of strangers who came into the town with their fatal illnesses upon them, the rate of mortality was only 9·6 per thousand in 1881, and not more than 12·6 per thousand in 1882. Many of the deaths were

of persons far advanced in years. The locality is exempt from endemic disease, and there is a singular freedom also from zymotic affections. The same reports state that bronchitis, pneumonia, and pleurisy are far from prevalent at Ventnor, and that "the ordinary population escapes many diseases incident to dwellers in (climatically speaking) less favoured portions of the country." Although the native population appears to enjoy no special immunity from consumption, the malady is relatively less frequent than in the country generally.

The sanitary arrangements of the town of Ventnor are now eminently satisfactory. The sewers have been carefully constructed, and are ventilated upon the system which one of the most distinguished inspectors of the Local Government Board recommended, after he had personally visited the town. By vigilant house-to-house inspection, the drainage and other sanitary arrangements of the dwelling-houses undergo periodical supervision. The water supply is a copious and an excellent one. The gathering ground is practically the Ventnor Down, and, more especially, the adjacent Wroxall Down. We need not at present concern ourselves with other reputed sources, from the hills of Hampshire and Surrey. The water has been pronounced by an eminent analyst, Mr. Otto Hehner, F.C.S., after examinations extending over several years, to be of constant, great, and unusual purity. In short, art

has now done all that science can suggest to keep the town of Ventnor as healthy as its natural advantages tend to make it.

With regard to the remaining part of the Undercliff, outside of Ventnor, the sanitary administration comes under the Isle of Wight Rural Sanitary Authority. The condition of Bonchurch, St. Lawrence, and the other portions of the district, is believed to be perfectly good, and the state of the public health bears testimony to it.

Vegetation.—Favourable conditions of a climate are always illustrated by the vegetation of the locality. With respect to the Undercliff, it is only necessary to say that we have the most beautiful evidences of this on every hand. In one direction, the eye rests on the blossoms of tender and delicate flowering shrubs, thriving in the open air in the cultivated gardens; turning another way, one sees the luxuriant foliage, the mosses and lichens, and the profusion of wild flowers in the fields. "I have counted," said the late Dr. G. A. Martin, "nearly fifty species of garden flowers blooming in the borders in December, and sweet-peas blossom on Christmas Day."

We have now concluded our brief survey of the Undercliff and its climate. Although our review has been kept as much as possible within short limits, the plain and simple requirements of invalids have been held in view. No attempt has been made to swell the pages, as might easily have been done, with

minute accounts of the geology, botany, and natural history of the district. Those who desire such information must refer to the books by Dr. Mantell, Dr. G. A. Martin, and the Rev. Canon Venables; while for meteorology they will require the tables published by Dr. Whitehead. There is certainly no reason for alluding to places of local interest, or for suggesting excursions to them; there may be some excuse for doing so in books dealing with foreign health-resorts; but the practice, on the whole, is not a good one. Invalids fatigue themselves during fine weather by walking to the famous spots, pleading that they were advised to be as much as possible in the open air. Many a winter's work has been undone by a cold caught on a coach-top in April, or by an attack of hæmorrhage brought on through clambering up and down hills under a hot May sun.

Enough has, however, been said to show that, taking Ventnor as the chief centre or capital of the Undercliff, we find it to be an admirably situated, singularly sheltered, picturesque, and healthy place, provided with an excellent water supply and good sanitary arrangements. Beyond these, it possesses certain notable advantages which well adapt it for the purposes of a sheltered health-resort. All its winds are sea-breezes, and those that prevail come from the warmer directions; while most of those from the cold quarters are broken in force or mitigated in severity. Then, for England, it is an unusually bright

and sunny place. The rainfall is small. The soil, being chalk and not clay, is very dry. The air is warm during winter and cool during summer; and the temperature is distinctly characterized by great equability. In the course of a year, there are exceedingly few days so wet or cold that invalids are debarred from outdoor exercise during some portion of the day.

The Place of the Climate Medically.—Let us now endeavour to define, more strictly from a medical point of view, the nature or class of climate to which that of the Undercliff belongs, pointing out at the same time the influence it is calculated to exert upon the body in health and disease.

The reader who consults works on climatology will find different classifications of climates made by various authors. Some writers group climates according to the places in which they are met with, and speak of the climate of the sea and of that of the mountain; of the inland air and the air of the sea-coast. This is, no doubt, the natural and correct division founded upon physical characters. For medical purposes we need to go a step further. A good deal is to be urged, therefore, in favour of classifying climates in accordance with their influence or effect upon bodily states, such as bracing, exciting, relaxing, and sedative. This division brings us more closely into contact with the requirements of our patients. Perhaps the best arrangement of land climates is that framed by Dr. Walshe, who combines both of these methods, and

forms four classes. These classes are (1) *sedative* climates; (2) *stimulant* climates; (3) climates having *an atmosphere adventitiously impregnated;* and (4) climates deriving *special characters from their altitude above the sea-level.* For studying the influence of climate in the treatment of diseases of the chest, this is a very convenient division, and for our present purpose we shall accept it in preference to all others.

Beginning with the third of these four classes, we may at once exclude the climate of the Undercliff from those which have an atmosphere adventitiously impregnated. It neither possesses a malarious air, like that said to benefit phthisical persons at Pozzuoli, on the Bay of Naples; nor can it lay claim to balsamic or resinous emanations, like those given off in the pine forests at Arcachon, in the south of France, and possibly, to some extent, also at Bournemouth. Neither should this climate properly be placed in the class comprising those which derive special characters from their altitude above the sea-level; for, although the variation in level to be had in the Undercliff is, as we shall presently see, of marked value in the treatment of some forms of pulmonary disease—asthma, for example—this class is really intended to embrace what are called "mountain climates," and deals with places five or ten thousand feet above the sea. We now come to the two remaining groups—the stimulant and the sedative. By sedative climates we understand those which are distinguished by a warm, moist air,

sedative or relaxing in its effects upon the animal economy, depressing the circulation and weakening tone. As examples, Madeira, Pau, Torquay, and Jersey may be mentioned. The Undercliff is, correctly speaking, not among them. It properly belongs to the stimulant class, and, although certainly very low down in the category, it is entitled to rank in the same list with St. Leonard's and Worthing in this country, and the more favoured Cannes, Mentone, Nice, and San Remo, on the shores of the Mediterranean. In contradistinction to the sedative climates, these are dry, bracing, and tonic, some of them being, of course, more so than others. Those that are high up in the scale are exciting, even irritating; less marked examples are more or less bracing or exhilarating. The climate of the Undercliff and Ventnor is, as has been said, low down in the list, and approaches the sedative class; it is genial without being relaxing, stimulant without being irritating.

From the observations which have now been made on the subject, it will be gathered that there are good theoretical grounds for regarding favourably the claims of the Undercliff to be a suitable place for sheltering, and for otherwise benefiting, invalids suffering from many chronic pulmonary disorders. Since these claims were first urged, more particularly since they were so clearly pointed out by the late Sir James Clark, several thousands of persons must have resorted to the southern coast of the Isle of Wight in search of

health. Eager friends have borne many a suffering relative to the spot, and have anxiously watched over the improvement or the decline that took place. Sympathizing though we must do, and very sincerely, with the disappointment and grief which followed blighted hopes, not less than we do with the gladness when the recovery sought for was obtained, let us pass away to harder facts. Let us try to glean for the guidance of ourselves and others some information from all this experience. Why is it that some cases improve while others do not? What are the cases which the climate of the Undercliff does help? It will be the endeavour of the few succeeding pages to throw some light upon these points. The reflection on the cases to be detailed may only bring us a ray of light, but even that may assist in guiding us one step further away from mere empiricism in this matter.

CHAPTER III.

PRELIMINARY SUMMARY OF CASES.

The cases upon which the greatest part of the following observations is based amount to 693 in number. Among them are included examples of all the chief forms of chronic disease of the chest. They are enumerated as follows :—

Table of Cases.

1. Of phthisis	542
2. Of asthma	38
3. Of chronic bronchitis and emphysema ...	76
4. Of chronic pleurisy and empyema ...	37
Total	693

Every individual patient on this list resided for a time in what has been already pointed out as the most sheltered part of the entire Undercliff, namely, that which includes Ventnor, and the villages of Bonchurch and St. Lawrence respectively to the east and the west of it. It may, therefore, be fairly allowed that the patients obtained, so far as situation is concerned, the fullest advantages the locality could be

expected to afford. The cases, as has been already mentioned, are drawn both from hospital and from private practice, and there is something to be said in favour of this plan. It extends the observations over all classes of the community, thus giving a good average experience; and it also allows an opinion to be formed of the influence of longer or shorter periods of stay in the district. The use of hospital statistics in estimating the good or evil influences of a climate upon diseases of the chest has, in a certain sense, been deprecated. For instance, there took place in the columns of the *Lancet*, in 1879, a sharp passage of arms between Dr. D. A. Ruedi, of Davos Platz, and Dr. Arthur Hill Hassall, of San Remo, in which this very subject was one of the causes of debate. Objection was taken to a contrast between the results obtained in two health-resorts, the cases compared being hopsital patients in the case of one of the places, and private patients in the case of the other. Now, it is quite evident that these two classes of persons represent very different capacities for improvement: the richer man gains nothing except climate by the change; while his less fortunate fellow-sufferer has perhaps not previously had open to him advantages of comfort, skilled nursing, and excellent food. Such comparisons, therefore, are apt to prove fallacious. The case is, however, quite different when experience is to be recounted of the results of treatment, under the benefits of improved climate, in a single health-

resort. Both hospital and private practice should then be laid under contribution; for the wider the sphere from which the cases are collected, the more true is likely to be the conclusion that is arrived at.

All of the hospital patients whose cases are enumerated in the foregoing table were inmates of the Royal National Hospital for Consumption and Diseases of the Chest. This is an institution which has been erected at Ventnor, upon a site which is undoubtedly the best that could have been chosen for the purpose in the whole Undercliff. It has been designed upon the separate or cottage principle. The patients are distributed through sixteen houses, and enjoy the advantage of having large sitting-rooms and separate bedrooms, along with many of the other comforts more often found in a private dwelling than in an hospital. As no other hospital in Europe can compare with it for the completeness with which the cottage system is carried out, and for the combination of comfort and scientific fitness for its special purpose, the results achieved within the institution have a public interest and value.

The private patients were mostly resident in Ventnor, and their surroundings and circumstances were, of course, various. They were all visited at their homes, so that the best efforts were made to become acquainted with every condition connected with their cases.

It is important to make a note regarding the length

of time each patient remained under observation. No case of consumption is included in the list unless the invalid spent at least ten weeks in the locality. Even this period may seem rather short when dealing with such a chronic disease as consumption; but the reason for making it the lowest limit is that it represented the average length of stay of patients in the hospital, during the time when the observations were recorded. With respect to other diseases besides consumption, it has not appeared necessary to lay down a hard-and-fast time-limit as to length of residence. In every case it was ascertained that a fair and reasonable trial of the climate was made, and, as a matter of fact, it in most instances considerably exceeded the period just named.

The patients were all thoroughly examined both on arrival and departure, and in every one a conscientious effort was made to form an accurate and truthful opinion on the comparative condition of the patient; and this opinion was noted down at the time.

Our first consideration will be turned to the chief chronic diseases of the chest *seriatim*. Something will afterwards be said on certain incidental complications, and for this purpose the observations will not be merely limited to the cases enumerated, but will be based upon the total experience derived in practice in the Undercliff. It is necessary, in watching these cases, to possess some knowledge of the usual course and progress of the diseases referred to, so that an

opinion may be formed on the conditions observed in patients, especially variations from the usual course in type, or severity, or duration. Only by having this knowledge as a foundation can the course run by diseases in a health-resort be compared with that which usually characterizes them.

CHAPTER IV.

OF PHTHISIS.

Following the plan we have laid down for ourselves of taking the chronic diseases of the chest *seriatim*, we shall begin with consumption. This malady is so terribly common that it is said to destroy a fifth part of the adult population of England, and to cause about a ninth of the deaths at all ages. In connection with chronic chest diseases, it is the very first to occur to mind. No apology will be needed, therefore, for devoting to it our fullest attention.

We have, then, before us for our consideration no less than 542 cases of consumption available for our present purpose; that is to say, although most of them were under observation for many months, some indeed for several consecutive years, none spent less than ten weeks in the Undercliff. It will be noticed that the number of cases of consumption, given on the table of cases, represents more than three times as many as all the other forms of chest-disease put together. And, indeed, it is true that an overwhelming majority of the invalids who are sent to winter

health-resorts on account of pulmonary affections are suffering from this great scourge of our country.

Results.—Attention is now drawn to the following table, which gives a brief summary of the results in these cases:—

TABLE OF RESULTS IN 542 CASES OF CONSUMPTION TREATED IN THE UNDERCLIFF.

Disease unchecked ...	73	Improved	101
Decidedly worse	40	Much improved	118
Died	28	Very greatly improved	132
	141	Amendment equivalent to restoration	50
Number who underwent improvement			401
Number who underwent no improvement			141
Total			542

To put it briefly, out of 542 cases, 401 reaped more or less benefit, representing 73·39 per cent. of the entire number.* It is, perhaps, hardly necessary to add that, in estimating the amount of improvement, care was taken not to be misled by that outward appearance of amendment which sometimes accrues to the general health of a patient as a result of change of climate, while the local disease in the lungs is all the time progressing. Gain in weight, which often comes as a consequence of good food, quiet, and

* This result confirms the table given in the first edition. It was there stated that out of 435 cases, 325 gained more or less benefit, that is to say, about 74 per cent.

good surroundings in hospital patients, is, when much stress is laid upon it, especially apt to be a source of error. Enormous and rapid gain of weight is sometimes made by hospital patients, such as is rarely, if ever, seen in private practice. In fact, it may at once be admitted that private patients do not gain weight like hospital patients; and it is well for the former to bear this in mind, since great anxiety is often displayed by them at their own slowness in regaining lost flesh.

While we are dealing with these cases of consumption as a whole, some further particulars may be stated. Let us, first of all, eliminate from our list the fatal cases, of which there were twenty-eight. Some of these died rather unexpectedly of hæmoptysis; but the majority of them certainly arrived in the Undercliff in a very advanced stage of the disease, many, indeed, being so ill as to be compelled to take to their beds very soon after their arrival. It is not desirable to enter into fuller particulars; but it may be remarked that at Ventnor, as happens no doubt in all health-resorts of repute, resident medical practitioners often see sad examples of the mistake made in sending far away from their own homes persons in whose cases recovery is impossible; and in whom amendment even cannot reasonably be looked for. Then at least two-thirds of those who became very markedly worse also arrived late on in the disease, that is, at a very advanced stage. In not a few

instances there were present distinct evidences of the implication of other parts of the system in the morbid action, many of these clear forecasts, if properly read, of what was inevitably coming.

This brings us to the subject of the stages of consumption, and the extent to which they were influenced by treatment in the climate of the Undercliff. It is requisite to be extremely careful about speaking to patients respecting the stages of their disease, or a great deal of harm may be unintentionally done. For what medical men mean by stages in a local pathological process is often misconstrued by patients to mean stages on the road to a fatal termination of their disease. Although those cases which became worse were nearly all far advanced in the disease on their arrival, on the other hand many advanced cases have undergone great and marked improvement. There is at present no harder worked man in Ventnor than one who came to the town ten years ago with a large cavity in one lung, that is to say, in the third stage of consumption. It is no doubt quite true that the more incipient the disease, the better, speaking in general terms, are the chances of recovery; and these are the cases which should be particularly urged to seek the aid of climate. But far more important than the stage of the disease is its extent and the amount of its circumscription, coupled with the tolerance the constitution displays. A highly feverish case, whatever the stage, should never be allowed to

travel. But little can be said here on the subject of the stages alone. The question must be taken into consideration along with and in subordination to some other matters, including the plan of remedial treatment.

The Varieties of Consumption.—It must be evident to every observant person that the sufferers from consumption differ remarkably from one another. We look at some and see them apparently melting away under the disease, and carrying in their faces and general aspect the unmistakable traces of its action; while others have such a stout and hearty bearing and healthy appearance, that surprise and doubt are almost expressed on hearing of the existence of the malady. A great deal of careful study has been given during late years to the etiology, or causation, of consumption; and it is hoped that we are coming to a more correct appreciation of the structural changes which take place in the disease—conditions which, however, still give rise to much debate. But many physicians who have devoted great attention to the mode of origin, the progress and the relation to one another of these changes in structure, believe that they have been able to recognize some well-marked forms or types of disease, more or less distinct, which were formerly grouped together under the name of phthisis. Could all this be satisfactorily settled, the value to the patient would be very great. If his case were sufficiently typical to admit of its being assigned

to a particular group or variety, he would be able to derive considerable information, often of a definite and intimate kind, and based upon deductions drawn from a large number of similar cases. This information would have its general bearings on every point of his case—the best treatment, and the probable course and progress of the disease.

It seems, therefore, highly desirable, not only to discuss these 542 cases of consumption in bulk, but to examine them under any varieties into which they can be divided. This subject of the varieties of consumption is, however, still one of the battle-fields of medicine. The amount of debate that has taken place on the question of tubercle alone is extraordinary; and the relations tubercle bears to consumption, as well as the number of interpretations that have been put upon the very word "tubercle," have constituted one of the difficulties of the student of medical science. The remarkable discovery by Koch of the existence of bacilli, apparently specific, in tubercle, is throwing immense light on the question; but it is too early yet to see clearly the meaning of this in all its bearings. It may or may not simplify the classification of phthisis into varieties. At any rate, pathologists and physicians have not yet decided among themselves either the number of forms they can single out, or what constitute the distinguishing marks. Some undoubtedly able men appear to differentiate their cases with difficulty, or not at all;

while others seem to have very little trouble or hesitation in grouping theirs into several classes. Just as was the case with regard to the classification of the forms of climate, so we are driven to accept a division of consumption into varieties made by one or other of our authorities. Under these circumstances, I prefer to follow the classification given by Dr. F. Roberts, in his "Handbook of Medicine." I do not pretend to see the lines of demarcation so clearly as to be able to arrange all my cases numerically under the various heads; but I believe I have been able to recognize broadly these varieties, in a manner sufficiently distinct to admit of my observing them in relation to the effects of climate. The forms of phthisis with which we have to deal, therefore, are six, namely—

1. The pneumonic (lobar) and catarrhal pneumonic.
2. The hæmorrhagic.
3. The fibroid.
4. The mechanical.
5. Secondary tubercular phthisis.
6. Primary tubercular phthisis.

We shall now consider every one of these varieties separately.

1. *Pneumonic (Lobar) and Catarrhal Pneumonic Phthisis.*—In this class are included cases of consumption which have an inflammatory origin. In the catarrhal form the onset is often insidious, the progress slow, the morbid action tends to limit itself,

and there is a natural tendency towards the arrest of the disease. Instances of this variety are common in practice, and I have over and over again seen them do well in this climate. Patients come with the disease progressing, have it arrested, and then retrograde processes are set up. Cavities tend to become dry and inactive, and are thus placed under the most favourable conditions for undergoing contraction. When once the moist, freely secreting state has been arrested, a very reasonable amount of care seems sufficient to maintain the improvement. The excavation having become dry and well walled in, surrounding pneumonic processes are checked, and the danger of fresh intercurrent pneumonia is at the same time greatly reduced. Even those cases of pneumonic origin, where extensive local damage has been done, will sometimes be helped to hold their ground for a remarkably long time, although the amount of injury would appear to have left the patients only the barest chance of recovery. And not seldom the chance of prolonged life hangs in these advanced cases by a mere thread. The morbid action may be quiescent. A temporary arrest may have overtaken those four great causes of further decline so well summed up by Dr. T. H. Green as profuse expectoration, diarrhœa, the structural changes in the stomach and intestines, and the increased tissue-change. The poor sufferers have just enough breathing space left to carry on that amount of oxidation of the blood without which the

flame of life would flicker out. My experience is that the risks of that essential portion of lung-substance being encroached upon by fresh catarrh are greatly diminished in the sheltered climate of the Undercliff. To illustrate this statement, some striking examples might be quoted in which the pulmonary mischief, although very extensive, had not completely overwhelmed the constitutional powers, and compelled nature to give up struggling; and where, notwithstanding that the system found it impossible to avail itself of the respite obtained from actively progressive lung-disease, life was yet prolonged far beyond the expectations of the patients or their friends.

Leaving now the consideration of the advanced forms, let us turn to the early and second stages. Amendment in these cases was very constantly observed. Indeed, when the constitutional powers were fairly maintained, and the medical history of the patients, prior to the illness, had been good, it was so customary to find improvement take place, that it began to be looked for under such circumstances almost as a rule. When this result unfortunately did not occur, it was nearly always possible to associate it with want of care, of prudence, or of obedience in the patient; or to insufficient time having been given for the beneficial effects of climate to declare themselves. We shall refer again to those conditions in which patients are themselves to blame; but with respect to the time required for the climate to work benefit, this

varies, as might be expected, in different cases and individuals. No two people improve at the same rate. In some the signs of amelioration come soon; and this may be ascribed to many circumstances, such as previous climatic history, diet, and treatment, and a general increase in comfort. In other patients it may be delayed, and for some time may not have proceeded further than the maintenance of a stationary condition. Be this as it may, I am confident that it is especially in this form of consumption, and most of all in these comparatively early cases, that we should impress upon patients the immense importance of prolonging their stay to the utmost of their power. They should not merely complete one winter, but follow it up in the future, either at Ventnor or at some other wintering station equally good. Patients themselves are scarcely able to estimate at its true value any tendency to arrest of local disease which exhibits itself in their cases, that is to say, its influence upon the prognosis. There can be no doubt that, by returning winter after winter, even when merely slight amelioration has been obtained, an amount of benefit might often be secured far beyond what patients, left to themselves, are too often content to accept. It is, of course, much more easy for private than for hospital patients to carry out this plan, and consequently it is most often among the former that it is seen to succeed. Nevertheless, even in hospital practice, the good effects of a repeated and prolonged trial of climate are

also observed. Unfortunately, the necessary regulations of hospitals place difficulties in the way of this. In the Royal National Hospital for Consumption, at Ventnor, the rules prevent a person from becoming for a second time an inmate, until at least twelve months have expired from the date of his departure. Could care be exercised in selecting the most suitable cases, nothing but the embarrassing task of adapting limited accommodation to the demands of a multitude of governors and patients could justify such a rule in the light of what has been said. No doubt the managers of all similar institutions find themselves in the same straits. The only course for such patients, if funds and friends hold out, is to seek admission into one of the other seaside hospitals for diseases of the chest. The National Sanatorium for Diseases of the Chest, at Bournemouth, and the All Saints' Hospital for Diseases of the Chest, at St. Leonard's, may be named. And it might be urged upon those who have the management of these institutions, that a great boon would be conferred if especial attention, and systematic or even combined help, could be extended to promising cases of this class.

All cases in these early stages are by no means so hopeful, unfortunately. Among them we find others, although possibly in the same stage of disease, who have a bad previous history, and exhibit too clear evidence that the morbid processes going on in the chest are seriously invading the constitutional powers.

Nevertheless, some of these patients have reaped considerable benefit under the improved conditions of climate, the amendment in general health having been especially conspicuous. Others, on the contrary, have lost ground. It is not very easy to say why there should be this difference. It only serves once again to illustrate on how many points the chances of every phthisical patient hang. One can only speak guardedly beforehand in such cases, while, except in evidently unpromising instances, it seems justifiable to afford the patient the advantage of climate. After a short stay a positive opinion can often be given.

2. *Hæmorrhagic Phthisis.*—This variety of consumption must not be understood to include all those cases in which blood-spitting has occurred, for that would be to embrace about eighty per cent. of cases of the disease. We class under it only those forms in which severe and generally copious hæmoptysis has been from the first, or during the course of the disease, a frequent or prominent symptom. This does not represent a very numerous class relatively.

To cases of this variety several instances have led me to believe that the climate is not only unsuitable, but perhaps even injurious. The examples coming under my notice were, as a rule, patients of robust appearance, with well-formed and capacious chests; the course of their disease was attended with considerable blood-spitting; but the stethoscope had not revealed more than rather vague and unsatisfactory

signs. There seems to be something special about this kind of hæmoptysis. The condition is undoubtedly amenable, to some extent, to the influences of climate; but it is not favourably influenced by that of the Undercliff. On the contrary, where this strong tendency to copious and repeated hæmoptysis has asserted itself, Ventnor is not suitable. One patient whose conditions exemplified this variety of consumption had seven profuse attacks of blood-spitting at Ventnor in eight weeks.

With regard to the influence of climate upon the ordinary hæmoptysis of chronic phthisis, it may be premised that blood-spitting occurs everywhere, of course, and quite irrespective of climate. Patients do not seem to escape it at Davos; while even in the sedative climate of Madeira, to which twenty phthisical persons were sent out from the Brompton Hospital for Consumption, in the winter, 1865–66, one of the twenty died suddenly from the rupture of a blood-vessel. Of Ventnor it can only be said that blood-spitting is not found to be a more frequent complication of phthisis there than elsewhere; nor have the attacks been more than usually obstinate in their management. In upwards of two thousand cases of phthisis which I have seen in the Undercliff, a fatal result, while under treatment, has followed hæmoptysis in not more than thirty instances.

It may not be without interest if I make a note here of some observations which would appear to show

that even the summer climate at Ventnor, although by no means recommended to phthisical persons, is not, however, prejudicial in ordinary hæmoptysis. The observations were recorded while I was resident medical officer at the hospital at Ventnor, during which time the institution was fully occupied by patients all the year round. There was thus afforded a basis for calculation such as cannot fairly be obtained in the constantly varying number of patients under treatment in private practice. The cases numbered 122. Of these seventy-three happened during the six months beginning with October and ending with April; while forty-nine took place during the summer six months. They may be stated month by month in the following table :—

TABLE OF 122 HOSPITAL CASES OF HÆMOPTYSIS, SHOWING THE MONTHS IN WHICH THEY OCCURRED.

	Cases.		Cases.		Cases
In January ...	14	In May ...	3	In September	8
„ February	22	„ June ...	10	„ October ...	12
„ March ...	12	„ July ...	7	„ November	8
„ April ...	11	„ August ...	9	„ December	6

These cases were carefully recorded in connection with a theory that variations in atmospheric pressure have an influence in causing hæmoptysis—a theory they fully disproved.*

* See the *Lancet*, Sept. 1876.

3. *Fibroid Phthisis.*—In the first edition of this little publication, an opinion was expressed that cases of fibroid phthisis do not undergo very great amelioration in the climate of the Undercliff. Further experience has led me to somewhat modify this statement. If we divide patients suffering from this variety of consumption into two clinical groups, according to the prominence of certain symptoms, it may be said that where the cough is hard and irritable, the expectoration scanty and difficult to remove, and where dyspnœa is readily provoked, the patient should be sent to a more sedative air than that of the Undercliff. These are the cases of fibroid phthisis which are least likely to benefit at Ventnor. On the other hand, when these symptoms are not so marked, that is to say, where cough is not especially violent and ineffectual, and expectoration is easy, the patients will find themselves, at any rate, in safe winter quarters at Ventnor, and will be assisted by its shelter to hold their own while they remain there. In order to avoid harassing the respiration, and to ward off those dragging pains in the chest which are so often found in this affection, patients, in taking outdoor exercise, ought to choose the most level ground they can find. If hills or long distances are to be traversed, it must be done by driving in a carriage, or very gentle riding on horseback.

It will be seen that I differ from those who recommend stimulant climates in fibroid phthisis. Some

cases do well, no doubt, in stimulant air of the less bracing sort; but such experience as I have had leads me to think that, on the whole, the more sedative the climate the better in this disease.

In those sufferers from fibroid phthisis who have a *specific* history, undoubted benefit is, as a rule, obtained at Ventnor. Perhaps the improvement in the pulmonary disease may be a direct consequence of the great amendment that takes place in the general health; probably, indeed, it is so. In patients of this class it is everything to effect an improved state of general health, if we are to help them to escape further penalties of the specific taint.

4. *Mechanical Phthisis.*—This affection is ranked among the varieties of phthisis by Dr. F. Roberts and Dr. Peacock, but by Dr. Headlam Greenhow, Dr. Milner Fothergill, and others it is placed among the forms of chronic bronchitis. Several instances of it have come under my notice among visitors to Ventnor. The disease differs considerably in type among different patients; and, as Dr. Greenhow very correctly observes, its course and prognosis are materially influenced by the kind of grit or dust which has set up the mechanical irritation. Grit, or the heavier kinds of dust, brings the condition into closer similarity with phthisis than the lighter sorts of dust, which develop a disease more allied to bronchitis than to consumption.

With the exception of those cases which came to

Ventnor really far advanced in the disease, the general health was found, on arrival, to have been wonderfully well preserved. So well, indeed, was this the case, that the only way of estimating improvement, or the reverse, was by confining one's investigations almost entirely to symptoms and physical signs which referred to the pulmonary organs. Again, in nearly every instance, the patients who came under treatment had followed their occupations almost up to the very day of their leaving their homes for the Isle of Wight. These two reasons made it not a little difficult to say how far the benefit that was derived came from change of climate; for it is perhaps scarcely fair to ascribe to change of climate, or to other remedial treatment, good results which were undoubtedly, to a great degree, engendered by cessation from the noxious employments. Probably the improvement was produced by a combination of beneficial influences. At any rate, the cases which came to Ventnor were much the better for their visit. By way of illustration, the case of a Wolverhampton edged-tool grinder may be quoted. This man, whose age was fifty-three, had worked at his occupation for forty-four years, without having used any precautions against its well-known injurious effects; and this, notwithstanding the fact that he had lost his father and one brother of "grinder's asthma." The patient was a powerfully built man, weighing 13 st. 9 lbs., but he had suffered from cough, expectoration, shortness

of breath, and other symptoms of the disease for upwards of a twelvemonth. The left lung was extensively consolidated, and there were signs of bronchitis on both sides. After a stay of three months at Ventnor, and under the treatment recommended in such cases by Dr. Greenhow, this patient progressed well. His general health, which was good on his arrival, was satisfactorily maintained, although he only gained three pounds in weight during that time. But he left Ventnor very greatly improved as to the state of his chest, the urgency of his symptoms having greatly decreased. The length of stay was, of course, short, but it was long enough to originate amendment which, under proper conditions, was likely to be still further increased. Similar results have been seen in other cases; for example, in stone-masons, millers, weavers, chaff-cutters, iron-turners, etc. The patients were nearly all inmates of the hospital, and, for the reasons already mentioned, their stay at Ventnor was not so long as could have been wished. In every case, however, benefit was obtained, and very little trouble was given by hæmoptysis or other complications.

5. *Secondary Tubercular Phthisis.*—The cases intended to be included in the present group are, unfortunately, common enough. There is no doubt about the diagnosis when the disease has extended beyond the lungs, and has regularly involved distant tissues and organs; that is to say, after the constitu-

tion has been invaded. But it is by no means so easy to distinguish the cases in the earliest stage, when the border line is being passed between what constitutes a local and a constitutional disease. This may be largely on account of the variety of situations in which it is possible for the tubercles to be developed. The first part of the malady being allowed to have depended solely on pneumonia, the tuberculosis has not taken place until an advanced stage of the disease, when, according to Neimeyer, it takes but little part in the disorganization of the lungs. The evidence that the action is in progress, therefore, will vary according to the parts first implicated. The precise nature of the complication, and the extent to which the constitutional powers are involved, regulate a patient's chances of deriving ultimate benefit from all of our remedial measures. This is especially true of climate. It is important, however, that we should discover as soon as possible when a case is passing out of the confines of the pneumonic group into those of the secondary tubercular. In order to make any beneficial use of climate, the condition must be taken in time.

I have watched a great many patients the type of whose disease would relegate their cases to this variety of consumption. They have comprised examples of all stages of the malady, from the earliest to the most advanced. While it is not possible to speak in very cheering terms of the improvement of many of the

local conditions of the disease, it was found that, in general health, a large majority of the patients underwent a certain amount of improvement. So far as my observation has gone, I am justified in stating that in all cases, except perhaps the most advanced, the progress of the mischief has been more or less retarded under the improved climatic surroundings. And Ventnor is especially adapted for such cases from its quietness. There are some who complain of the absence from its roads and streets of the stir and gaiety of some fashionable watering-places. But this very fact gives it a charm to many invalids, and by none is it more appreciated than by some of the patients whose cases we are now considering. It is a melancholy sight to see these feeble sufferers endeavouring to creep along in the sunshine, in the midst of the jaunty and bustling crowds found in some of the more readily accessible health-resorts.

There are cases which are more likely than others to derive benefit from a stay at Ventnor. For this purpose those should be selected, first of all, who are not suffering from any extensive febrile movement. Then, also, the general system should have shown itself reasonably tolerant of the encroachments of the disease. It will be an additional point in favour of a case if there is a history of previous arrest having taken place. It may be questioned how far it is justifiable to recommend change of climate to a

patient, from whose case these favourable circumstances are markedly absent.

Looking at the influence of the climate upon the leading complications with which one has to deal in this variety of consumption, it may be said that the intestinal are probably those which receive most benefit at Ventnor. It has been noticeable that several instances of diarrhœa, previously obstinate, have yielded here to comparatively simple treatment. This has not always been so, however; a few troublesome exceptions have been encountered. We next come to the laryngeal lesions. Where there has been success, it has been in early cases; advanced forms, when they are allowed to leave home at all, should be recommended to a softer air, and one less bracing even than that of the Undercliff. All well-developed laryngeal cases have an uncertain prognosis, and this applies quite as much to immediate as to remote issues. Wherever there is advanced mischief in the larynx as well as in the lungs, it should never be forgotten that fatigue in any form, and especially a long railway journey, is badly borne. It is, therefore, far wiser not to permit such cases to travel; the patient should be told that his chance of gaining benefit from climate is not great enough to justify the risk. There is another complication to which it is scarcely necessary to refer. Of tubercular meningitis, it is to be feared, there is but one experience wherever it is found.

On the whole, then, while it does not seem possible to speak in a very encouraging manner of the experience of secondary tubercular phthisis in the Undercliff, it may be said with truth that, although very advanced cases are not capable of receiving much assistance from climate, most cases in which the mischief is early will, nevertheless, reap some benefit at Ventnor. This is more likely to be found when the complications are intestinal, or in an early form in the larynx. At all events, it would be right to give the benefit of the doubt to all cases of phthisis in which the existence of secondary tubercular damage is suspected, and thus afford them the opportunity of gaining advantage from the climate.

Such cases should not be left without constant medical supervision when sent away from home. It is advisable that they, or their friends, should be advised about their movements, according to the progress which the malady is making.

6. *Primary Tubercular Phthisis.*—The character of the account, that has just been given of the influence of the climate in secondary tubercular consumption, will not have prepared the reader for a very satisfactory report regarding the cases classed in the category of primary tubercular phthisis. But this is no more than the usual prognosis in this variety of the disease would lead us to expect.

Now, the laity have such a strong idea of the utility of change of climate in consumption, that none who

can afford the expense will willingly allow a relative to be deprived of this aid to treatment. Consequently the medical attendant soon finds himself compelled to give his opinion on the question. In cases of primary tubercular phthisis it is pre-eminently his duty to be swayed by no consideration whatever, except what is for the bodily good of his patient. It is emphatically necessary for him to be on his guard. The state of the lungs alone must not be taken as the index, or the ill-marked physical signs, characteristic of these cases, will prove very misleading. The medical adviser must recollect how acutely the whole system suffers in this form of consumption, keeping before his mind the steady progress, almost malignant in its character, which the disease makes. He must come to his decision entirely from his knowledge of the type of phthisis with which he has to deal; and he must be prepared to maintain his views, and hold his ground, in spite of the pressure of any injudicious friends.

Of all forms of phthisis it is in the present class that the question of climate requires the most careful consideration and management. If a visit to a health-resort be recommended at all, let such advice be given only to very early cases, where the symptoms show less acuteness than is often found. In such cases, I think the progress of the disease has sometimes appeared to have been retarded by the climate of the Undercliff. But long before the disease in the lungs

is what we call advanced, it is accompanied by so much fever, shortness of breath, wasting, and weakness that the sufferer is necessarily to a great extent confined to the house; and change of climate, in its fullest sense, can be of no especial service to him. Cases of this sort have been under observation here, and although some of them were able to surround themselves with all that wealth could obtain, the result has been disappointing. One instance in particular might be referred to. The sufferer arrived at a very early period of the disease; so early, indeed, that a well-known London physician who makes diseases of the lungs a specialty, but who, by the way, never examined the back of this patient's chest, considered the illness to be of cardiac origin. The invalid resided in one of the very best situations in the Undercliff, and enjoyed there advantages such as are afforded to but few persons. Nothing likely to be of any assistance in his case was wanting in his surroundings. The diagnosis was revised, and the treatment decided upon from time to time, in consultation with another London physician. In spite of everything that was done, the course and duration of the illness appeared to be precisely similar to what is usually seen. I cannot say that I observed any distinct benefit which could be ascribed to climate.

I am convinced that when the disease is advanced, or of a type more than ordinarily rapid, any promise

of relief from change of climate will bring no credit upon the medical attendant who gives it. On the other hand, it will end in bitter disappointment to the patients, not to speak of trouble and grief to the friends.

We have now given our attention to consumption as seen in what are regarded as its several varieties; and we have endeavoured to elicit, as far as possible, to what patients the climate of the Undercliff holds out a prospect of benefit.

It is necessary, before concluding the remarks upon the disease, to add a few particulars respecting the course followed by the chief complications which are liable to attend its progress. Some of these have already been referred to, but a certain amount of repetition is unavoidable. Taking hæmoptysis as the first of these, experience shows, as has been stated, that the ordinary blood-spitting of phthisis is not more common at Ventnor than it is elsewhere; nor is it more obstinate in its treatment. This is important evidence with reference to a frequent source of trouble in consumption. Of intestinal complications it has been observed that, as a rule, they are relieved while in the Undercliff. Again, when the larynx is the part involved, the patients often improve if the mischief is not too far advanced. Full reference will be found in a subsequent chapter to the various dyspeptic states so often found in association with consumption, as well as with other pulmonary affections. It may,

however, be mentioned here that, with the exception of some of the gastritic or inflammatory forms, no variety of dyspepsia is a contra-indication to the climate; indeed, its action in some cases is exceedingly beneficial. Among the complications of phthisis, perhaps no condition is more worthy of mention than the profuse night-sweats, because nothing more surely saps a patient's chances of progress. These night-sweats, often so distressing and intractable in consumption, are not usually a cause of much trouble at Ventnor. The climate appears to favour their abatement, and they rarely fail to disappear under the present powerful means of treatment. Last of all, we must enumerate the liability to pneumonia, bronchitis, and pleurisy. This is a tendency which is certainly greatly diminished by the climate; when any one of these conditions is grafted upon old-standing chest-mischief, it generally runs a mild and favourable course here. The climate also affords the patient an excellent chance of speedily regaining the state in which the intercurrent complication found him.

In concluding this report on the experience of consumption in the Undercliff, I cannot review what has been stated without seeing that, for a very large majority of persons who suffer from the disease, Ventnor and the Undercliff offer a most promising prospect of benefit. As far as has been possible, the kinds of cases in which this hope does not appear to be held out have been indicated. These, however,

constitute comparatively a small proportion of those phthisical persons who are able to resort to a health-station with advantage. There are, of course, numbers of other *sanitaria;* but the claim of the Undercliff of the Isle of Wight to rank high among them as a resort for sufferers from consumption is, in my experience, fully established, especially for those who are benefited by a genial climate—a comparatively large class.

CHAPTER V.

OF ASTHMA.

My observations of the influence of the climate in asthma have not been so extensive as could have been wished for the present purpose. They are confined to thirty-eight cases, and nearly all of them were cases of spasmodic bronchial asthma, in which the paroxysms were excited through the reflex irritant influence of bronchitis—chiefly chronic—and emphysema. Although I have had these thirty-eight patients under my attention for various periods, they have certainly afforded me remarkably few opportunities of witnessing asthmatic paroxysms. This comparative freedom from attacks might have been due to my good fortune in escaping sufferers, to whom the climate of the Undercliff would have proved asthma-generating. It was much more correctly, however, the consequence of a genuine improvement in the health of the patients. Asthmatic attacks did, of course, occur in some cases; but in the majority of patients the best proof of the benefit and comfort they derived was seen in the fact that they preferred to remain at Ventnor.

Asthma is proverbially a capricious disorder. Everybody knows how singularly varied are the experiences of the sufferers with regard to the matter of climate; and it is very difficult to explain the reason of this diversity of experience. Certain climates or atmospheres are believed to be actually capable of causing asthma in some individuals, the temperature, the purity, the moisture, or the dryness of the air, the amount of atmospheric pressure, even the amount of solar light, having been accused of provoking, or at least contributing to, a fit. On the other hand, particular climates are proved by experiment to supply to some asthmatics certain conditions necessary for their relief. Unfortunately, our knowledge on these points is to a large extent empirical, and it must be admitted that the difficulties in the way of helping asthmatic patients in the choice of a climate are not small. In none of its varieties will asthma consent to abide by the usual rules laid down about climate. The medical adviser's task is far from an easy one in these cases, and he has to take care that, in considering the means of relieving the difficulty of breathing, he does not lose sight of the sufferer's state of health as a whole. One eminent authority on the disease observed that the worse the air is for the general health, the better it is for the asthma; but surely this could not be transformed into a safe working rule.

Except among strangers, asthma is by no means a common disease in the Undercliff. The late Dr. G.

A. Martin, of Ventnor, stated that this affection, as occurring among the resident population, was hardly known. From my own observation I am able to endorse this testimony. I formerly held the appointment of Medical Officer of the Godshill District of the Isle of Wight Union, and the main part of the population of this district resides in the Undercliff. During the entire period of my tenure of office, nearly three years, only two pauper cases of asthma were under treatment.

With regard to the effects of the climate upon asthma in strangers, my experience is almost limited to the thirty-eight cases already specified. In appropriating these cases for the purposes of this report, it was not necessary to impose on the selection the same time-limit as was done in reference to phthisis; asthma responds so speedily to good or bad influences, that such a method seemed needless. It may, however, be mentioned that the length of time these patients stayed at Ventnor varied from as short a period as four weeks to so long as three winters.

The 38 patients included 21 men and 17 women. The men were far more fortunate than the women in respect to the amount of benefit received. Out of 21 men, 19 obtained relief, and in some instances the relief was complete; one of the two remaining patients was neither better nor worse, one was decidedly worse. Now, among the 17 women, four derived no benefit, while other two had their asthma increased. The

more favourable experience of the men as compared with that of the women may have been purely accidental. I am inclined, however, to think that it was because, in the men, the bronchitic factor in the asthma was in the ascendant; whereas the neurotic element was more marked in the women. It may be mentioned that two out of the six women who failed to benefit were in addition suffering, and somewhat acutely, from uterine displacements. My opinion is that the nearer the paroxysms approach the purely nervous form, the less likely are they to derive assistance from the climate of the Undercliff.

It is noteworthy how, more especially, the asthmatic who is driven from town or city life will oftentimes breathe with comfort in the Undercliff. This was well illustrated by one of the cases. The patient was a young man, aged twenty-two, who had spent his previous life in London, and had suffered fortnightly from paroxysms of dyspnœa which usually made him a prisoner to his room for two days. He came to Ventnor, and during a stay of eleven weeks enjoyed the most complete freedom from his foe. Compelled by his occupation to return to London at the end of that time, he was attacked as severely as ever two days after his arrival there.

When dealing with the place of the climate of the Undercliff medically, reference was made to the fact that the variations of level at which dwellings are to be had at Ventnor are of considerable value in the treatment of

some forms of disease. This is constantly found to be the case in asthma. A young man arrived in Ventnor, an asthmatic, and went into lodgings in a house situated 170 feet above the sea-level. While residing there he kept perfectly well. Wishful to be nearer the beach and the Esplanade, he removed to a house standing only 44 feet above the level of the sea. On my being called to visit him, he reported that ever since going to the lower house, five weeks before, he had been battling with his asthma, and had scarcely spent a single night out of his chair. He was at once taken back to the higher house he had at first occupied. His respiration slackened in four hours, he enjoyed his rest the first night, and when seen many weeks afterwards he reported that he had experienced uninterrupted freedom from the attacks. It is astonishing how little makes a difference in these distressing cases. Another instance might be mentioned in which the relief was obtained by removing the patient even a smaller distance—from a house 119 feet above the sea to another only 106 feet higher.* At Ventnor, houses are to be had at elevations from 20 feet to about 500 feet above the English Channel. Whether the relief secured is a consequence of the elevation alone, or whether it results from the more free access of air secured by the higher level, especially in land having the configuration met with in the

* I am indebted for the accuracy of all of these measurements to the trouble kindly taken for me by Mr. R. Scott, the town surveyor.

Undercliff, I do not pretend to say. It is enough for my purpose to point out how benefit may, in many cases, be obtained. Exceptions occur, of course, but the majority of the asthmatic patients I have seen have found themselves better on the heights than near the water-side. As to locality, asthmatics appear more invariably to have done well in Ventnor than in other portions of the Undercliff, certainly better than at Bonchurch or at Niton. But both locality and elevation will be of little use unless care be exercised in the choice of apartments. I have seen more than one patient living in stuffy lodgings, and loudly declaiming against the climate, find, on trying the change, that more airy rooms made every difference to the asthma. It is very important that the apartments should receive as much sunlight as possible, and about this there need be no difficulty at Ventnor.

Before deciding upon a climate for an asthmatic patient, it is always a good plan to ascertain from him his peculiarities with regard to air and locality. Some have learned by repeated trials that they are never well in the country, or, it may be, in the town or at the seaside. Even the influence of the prevailing winds in the place proposed for a residence may be inquired about. There is a patient now under my care whose breathing is always tightened when the wind blows from the westward. As the great majority of the winds blowing over Ventnor come from the western rather than the eastern side, this patient's

easy days are fewer than her days of more or less suffering. Every asthmatic person has his individual peculiarities, and some good hints for the management of these patients can be obtained by interrogating the sufferers upon their personal knowledge of themselves.

CHAPTER VI.

OF CHRONIC BRONCHITIS AND EMPHYSEMA.

All medical writers agree in recommending persons who suffer from chronic bronchitis to seek, if possible, a warm and equable winter climate. And although in no form of pulmonary disease is such advice, perhaps, more warranted by experience, it is a little astonishing, when we consider how common an affliction chronic bronchitis is, that there are not more sufferers from it found wintering in our health-resorts. Although very frequent among the labouring classes, the disease is by no means confined to them. The present notes refer to seventy-six cases, among which it has seemed best to include also cases of emphysema. It is convenient to take these two affections under one heading on account of their usual association, although to some extent a separate consideration of them will be necessary.

Emphysema.—With regard to emphysema it is not possible to give much definite information beyond what has been noted in reference to asthma. A residence in a suitable climate—and the Undercliff

has in my experience proved to be so—is often a source of great benefit to emphysematous persons. At least two factors in producing the breathlessness in this disease are in a certain degree met by the climate. In the first place, the lessened power of aërating blood, caused by the impairment of the tissues of the lungs, renders a pure atmosphere of immense assistance to the breathing apparatus. The good effects of this are apparent in the improvement in tone and vigour of the patients. In the next place, the chances of accessions of bronchial catarrh are lessened; and no one who has seen much of this malady will dispute the serious influence such catarrhal attacks have in aggravating the dyspnœa. The importance of the latter, both to the present comfort and the future progress of a case, can scarcely be over-estimated.

The cases of emphysema I have observed at Ventnor have included the chief varieties, and, as a rule, they have been benefited. Something depends upon the nature, whether of senile origin, bronchitic, or vicarious, as indeed it does with reference to prognosis and treatment generally. It may be remarked, as was observed in connection with asthma, that the patient's own experience of the place will be the best criterion of its adaptation to his or her case. Some of the sufferers from emphysema have had to leave Ventnor on account of increased difficulty of breathing. These have included some in whom the affection was secondary to phthisis. On the whole, however, the

experience has been favourable. Patients who are sent to the Undercliff should seek the level that agrees with them, and then should confine their exercise to that level, avoiding as much as possible the more hilly roads. Even in this climate great care must be used with regard to warm clothing, and the measures adopted to prevent taking cold should in no way be relaxed.

Chronic Bronchitis.—The cases of chronic bronchitis which are now referred to included, first of all, seven well-marked instances of bronchiectasis, or dilated bronchi. Four of these improved, one lost ground, two remained in a stationary condition. A case of plastic bronchitis in a middle-aged man derived no benefit. The rest of the patients suffered from the more ordinary types of the disease, many of them having in addition more or less emphysema. The great majority improved; but in some of the cases in which amendment did not take place, it seemed rather to be on account of the climate not suiting the emphysema as already mentioned.

The climate does not agree very well with cases of dry catarrh, the *catarrh sec*. The air does not appear to be adapted to the swollen, irritable, scantily secreting mucous membrane of this form of the disease. If Ventnor be tried at all, April, May, and June are perhaps the months in which the atmosphere is in every respect most likely to prove beneficial; and a residence on the lower levels should be selected. In

the colder months of the year, Ventnor undoubtedly offers great protection, but in these cases of dry catarrh there are other climates which are even more advantageous then. The climate of the Undercliff is eminently useful, however, in those more common forms of bronchitis which are attended with copious and free secretion. As might be expected, the results are only palliative in the old-standing and degenerative kinds of senile bronchitis. It is probable, however, that the progressive changes of structure always found in these cases are delayed by the good effects of the climate; and, consequently, some of the serious complications set up by the disease are postponed. With regard to these sufferers, and it relates especially to their general health, it should be recollected that a resort to a sheltered climate is particularly advisable in aged patients, in whom the vital powers are so low as to render them unable to resist cold, and, worse than all, cold and damp combined. It is true that this inability to maintain natural warmth is characteristic of all persons with chronic bronchitis, in a greater or less degree; but it is markedly the case with old people. For these the Undercliff has special recommendations. For young children, too, in whom strumous habit produces a tendency to bronchitis, the marine and protected climate of Ventnor, with its great amount of winter sunshine, is very helpful. There is one class of young bronchitic patients to whom a brief reference may be made, however,

because of the disappointment occasionally felt that, in spite of a residence in the Undercliff, they have not succeeded in averting the attacks. My object is to point out that this want of success is, in reality, the consequence of a neglect of other points in their treatment. These patients are generally under twenty years of age, often very young. Not uncommonly they have a family history of struma, rheumatism, or gout. They are subject to recurrent bronchitic attacks. For short periods together, of a few weeks or even months, they remain well; then catarrh appears in the head or throat, generally the former, and this in a day or two almost invariably goes on to subacute bronchitis. Several of these illnesses may occur in a year, often without any very clear history of exposure; and the patient may become, by his insecure health, to all intents and purposes, an invalid. Now, few diseases are more benefited by purgatives, properly timed, than chronic bronchitis. In the cases just indicated, the key to the treatment is the prompt and effectual clearing out of bowels and liver. When one becomes familiar with such patients, the early and efficient carrying out of this line of treatment, at the very time the coryza is showing itself, may avert the bronchitic attack. It will be explained later on that constipation is occasionally an acquired difficulty during a residence in the Undercliff, and that a sluggish performance of hepatic functions is apt to be engendered by dwelling too near the seaside. If a

patient is to reap any benefit from the climate, it is evident that these points will require recognition and careful watching. It is, of course, well known that in later life bronchial irritation is often mixed up with, sometimes indeed partly depends upon, derangements of the digestive system. Niemeyer has given a graphic picture of these cases. "We have found the malady to be a very common one in advanced life, but particularly so among a class of people of about fifty years of age, 'high livers,' who drink wine freely, sit all day, assimilating much material and consuming but little; with hæmorrhoids, and a voluminous paunch, who evince a great tendency to chronic affections of the abdomen, as well as to chronic bronchial catarrh." These persons will not find benefit in any climate, however good, unless they alter their habits and attend to the physiological laws of health.

It is not necessary to go into further detail respecting chronic bronchitis. It is sufficient to say that in the Undercliff there is to be found an admirable shelter from this very prevalent disease. A few general words may be said in conclusion. Bronchitics who intend to winter away from home should set off early. They often make a great mistake in regarding an absence from home for a lengthened period as a sacrifice that is not called for. Even in confirmed cases, patients will set their faces against leaving their occupations. This is a serious error. A patient's

progress during a whole winter depends upon his beginning the season well; and it is worth while taking the utmost pains to avert as long as possible the contracting of the first cold. The invalid, for such he should consider himself, ought to be established in his new quarters not a day later than the middle of October. His dwelling must be the sunniest he can find; and he should only go out of doors in warmth and sunshine. When the chronic bronchitic can be persuaded to take care of himself, which is not often, a winter spent in a sheltered climate like that of the Undercliff will generally do him signal service. Especially is it to be recommended to those whose illness is of recent history. On the whole, no climate in the kingdom is more beneficial in this affection. My experience fully bears out what has been so forcibly written by Dr. Milner Fothergill, in his very practical work on "Chronic Bronchitis." He says, "The south coast, and especially the Undercliff of the Isle of Wight, affords good winter residence. What could be better than to breathe the balmy air of a sunny spring day from the top of Blackgang Chine; taking in the ozone borne by the ocean breeze, wafted over the warm salt water of the Gulf Stream, ready aired for the sufferer's wants? or in the brief sunshine of a winter day to venture out under Steephill, past the National Hospital for Consumption—the finest site for the purpose within the four seas of Great Britain?"

CHAPTER VII.

ON CHRONIC PLEURISY AND EMPYEMA.

My remarks upon chronic pleurisy and empyema in the Undercliff are based upon the observation of a smaller number of patients than was the case with any of the other forms of pulmonary disease. The cases amount to thirty-seven in all.

A limited number of patients were seen in whom, as a result of pleurisy, the thorax was retracted, the side painful, and the general health impaired. As a rule, it was in the last of these points, that is, in the general health, that improvement chiefly took place. Amendment in the local conditions came, on the whole, very slowly, and some of the symptoms gave considerable trouble. There is no reason for surprise at this delay in progress, for, in the removal of that obstinate exudation which often lingers after a pleuritic attack, time is a most important element. In aiding the absorption of these local conditions, it is very necessary to rectify as far as possible any impairment of the blood supply. The amelioration in the general health which came to the majority of

the patients as a result of their residence in the Undercliff was, therefore, a first and very essential step in their convalescence from the more tardy local conditions. It may be mentioned, in connection with the cases, that they were all of simple origin; that is to say, they resulted from cold or exposure, were primary, and not a sequel to other diseases or to injury.

Among the thirty-seven patients are included several who were suffering from empyema. In ten of these the pleural contents had been discharged through the lungs. The patients were in various stages of the disease, among them being a case in which the bronchial fistula was formed directly after the sufferer was brought to Ventnor. There was thus every opportunity of seeing the influence of climate at various points in the course of the affection. Although all of the patients were ultimately lost sight of by their departure from the Undercliff while the disease was still in progress, improvement took place in every instance except two before they left. The tendency was to a diminution of pus formation, proved partly by the lessening of the expectoration. Improvement in the physical signs was noted along with marked amendment in the general health. The two exceptions to this otherwise favourable report are recorded as having left Ventnor without being either better or worse for their stay. They were both men, hospital patients, aged respectively twenty-seven and twenty-

nine; and they had each been greatly reduced in health and strength by previous years of overwork under unfavourable circumstances.

There were only four cases of empyema with parietal fistulæ. In all of them the fistulæ had formed before they came to the Isle of Wight. The patient who remained here longest—six months—left with the fistulæ healed, and his health to all intents and purposes restored. Nor had this case previously run a long course; but the patient was a young man who, until the time of his attack, had enjoyed vigorous health. In the remaining three instances highly encouraging results were obtained, up to a certain point. A great deal of the chest discomfort was relieved, and the purulent discharge decreased to the smallest possible quantity, without, however, altogether subsiding. The general health was in every case very greatly improved. The patients were all under twenty years of age. On the whole, patients with parietal fistulæ perhaps showed themselves somewhat less open to benefit by the climate, than those with bronchial fistulæ.

The experience of these cases has shown the importance in empyema, and also in chronic pleurisy where the absorption of exudation is stubborn, of advising the invalid to change his health-resort whenever the symptoms demonstrate that a decided check has occurred in the progress towards recovery. In these affections a better and more speedy result is often

obtained by having recourse to a well-arranged succession of places than by a prolonged sojourn in one locality. In planning such a succession, the Undercliff assuredly deserves to be borne in mind as capable of rendering great service.

The precise spot chosen for a residence in Ventnor by such patients should be on one of the sunny and moderately level terraces or roads. The invalid must be cautioned, if his illness be at all recent, about the ill effects which will follow long and fatiguing walks, and especially hill-climbing. How far vigorous exercise may be of assistance in less recent cases must be considered separately for every individual case. The need for this warning has been taught me by having seen more than one patient repenting over the drawbacks produced by such indiscretion Avoidance of over-fatigue, sedulous care with regard to exposure, and the choice of a sunny dwelling, will also do much to save patients from the pleurodynia which is not unfrequently a cause of alarm and trouble after pleurisy.

CHAPTER VIII.

SUMMARY.

We have now had under our consideration the principal and most common forms of chronic pulmonary disease. The remarks have been as detailed as the observation of the cases warranted. It may be well here to devote a few sentences to a summary of what has been said.

1. Of patients suffering from consumption a very large proportion may resort to the Undercliff with a well-founded anticipation of reaping distinct benefit. When the disease is of inflammatory origin, and the mischief is not too advanced, decided progress towards what will practically be recovery may be looked for. Even in some of the less favourable types, the early cases of secondary tubercular phthisis, for example, the general effects of the sheltered climate, when its advantages are prudently made use of, may be such as to bring about a stationary condition of the disease; or, at the very least, its course may be retarded. Ordinary hæmoptysis is no contra-indication; but,

except in its elevated portions, the Undercliff is not a suitable place in what is described as hæmorrhagic phthisis. Many patients suffering from fibroid phthisis obtain benefit from the climate, especially those in whom the symptoms are not strongly marked. The experience with regard to the mechanical forms of phthisis has been satisfactory. While those patients with consumption in whom there are advanced signs of constitutional invasion are best at home, certain complications seem to be favourably influenced during a residence in the Undercliff. Among these complications may be mentioned the intestinal and the early laryngeal lesions. Very little good purpose is served by sending to the Undercliff far advanced cases of any of the varieties of phthisis. This is more particularly true with reference to primary tubercular phthisis, and the later stages of the secondary tubercular form; in such cases the question of change of climate, or the removal of the patient from home, ought not to be thought of. In selecting cases, the condition of the morbid action in the lungs should, of course, be investigated; but it is far more important to note the amount of circumscription of the disease, together with the extent of lung available for respiratory purposes, than to be guided by the so-called "stages" of the mischief. Highly febrile cases should not be permitted to travel long distances.

2. With regard to asthma, the observations, so far as they go, justify the recommendation of the climate

as one that holds out a very good chance of proving suitable. Along with its general usefulness of shelter and pure air, the locality offers peculiar advantages to asthmatic persons in the variety of elevations which are available for trial. Those whose dyspnœa occurs in town or city life are especially likely to benefit at Ventnor. Experience also leans towards the opinion that the more the bronchitic factor takes the lead in the causation of the asthma, and the less the paroxysms approach the purely nervous form, the more likelihood is there of the patient improving in the Undercliff.

3. The climate is available for a very large number of sufferers from chronic bronchitis, and merits a more extensive trial in this disease than it has hitherto had. It scarcely is adapted to the relief of cases of dry catarrh, in which there is irritable cough accompanied with difficult, scanty expectoration, and short breath. But it is highly beneficial in other and more common forms of the affection. Let it be remembered that a short residence is not sufficient to effect permanent good. Bronchitic patients, in whom the condition is not confirmed, often make a mistake in not coming to Ventnor till the disease has laid a firm hold upon them; and cases of old standing are apt to delay their arrival till too late in the season, oftentimes sacrificing a great portion of the benefit of the visit by allowing the first catarrh of the winter to overtake them before they reach the Undercliff. In

emphysema the patient's own experience will be his best guide. But the climate so often proves suitable and serviceable, that it may be recommended to patients with considerable confidence.

4. Most valuable aid is often rendered by the climate in promoting recovery from chronic pleurisy and empyema. It is quite entitled to claim the favourable attention of those who may be called upon to decide and devise for patients the succession of climates, which seems so helpful in the treatment of those affections.

CHAPTER IX.

ON CERTAIN INCIDENTAL AND OTHER CONDITIONS.

It is impossible to treat a disease successfully without paying proper attention to all the circumstances regarding the health of the individual in whom it occurs. In no point of treatment is a consideration of these questions more important than in respect to the use of climate. No excuse is needed, therefore, for referring now in greater detail to certain conditions often complicating those pulmonary diseases with which our attention has been engaged. These states may possibly be an inherent part or a direct consequence of the malady; or they may be the outcome of the patient's peculiarity of constitution or his diathesis. At any rate, when they occur in connection with the pulmonary affection, attention to them is a *sine quâ non* if treatment is to be followed with any degree of success.

The following remarks upon some of these points are not limited to observations on the cases already tabulated, but are founded upon an experience of all cases treated in the Undercliff; and they include many

hundreds of chest cases which, not being eligible for enumeration, were not reckoned in the tables.

Dyspepsia.—Of incidental conditions by far the most common, and by no means the least troublesome, are those which arise from disturbances of digestion. To choose a climate for an invalid without giving some consideration to the way in which his stomach performs its functions, would evidently be unpardonable. And not only is the present state of those functions to be observed, but the way in which they will be affected by the proposed climate must be made a subject of thoughtful inquiry. It is therefore plainly necessary to say a few words upon the influence of the climate of the Undercliff on the various forms of chronic dyspepsia; and the chronic variety is taken, because most of the cases of dyspepsia met with in practice belong to it. We shall proceed to review the subject under the subdivisions of gastritic, atonic, and nervous—forms which, although often badly marked, are yet, as broad classes, distinguishable in the main.

Of these three varieties, the *gastritic* is probably that to which the climate of the Undercliff is least adapted. Cases of it are usually found to be injuriously affected by a strongly stimulant air. The air of the Undercliff is, however, not stimulant enough to act disadvantageously; on the other hand, it is not sedative enough to be very beneficial. When it is thought desirable for these patients to remain in

the Undercliff, and the irritative symptoms, although present, take a minor place in the general morbid state of health, the best situations are to be found on some of the lower levels. The excellent houses on the terraces lining Ventnor Cove are particularly to be recommended in such cases. Most chronic dyspeptics, however, are suffering from the *atonic* form, and, as a rule, the Undercliff proves exceedingly suitable in this condition. If the signs are not very marked, the patient may be allowed to choose his residence on the lower or middle levels; but when the symptoms are well pronounced, he must live as far up the heights as is prudent for his pulmonary affection. Only by keeping to the upper levels can such cases hope to avoid the habitual constipation, the evidences of deficient elimination of bile, the weight and fulness after food, which will be increased at the lower elevations. Obstinacy of the symptoms should be interpreted to mean a necessity for going higher and higher up what may be termed the Highlands of Ventnor. By prudent attention to this matter, the natural powers may be much encouraged, and the need for assistance from medicines to a great degree avoided. One other variety of dyspepsia remains, the *nervous;* and this form is generally benefited, to a marked extent, by a residence in the Undercliff. The tendency to diarrhœa, so often present in these cases, is checked; and the pain and other symptoms of this type of the disorder undergo similar improve-

ment. More freedom may be allowed to these patients in the choice of a dwelling, some finding themselves better at one elevation and some at another; and most of them derive benefit from an occasional change.

To return for a moment to the influence of the climate upon the assimilative powers of patients suffering more particularly from diseases of the chest, the following data, which are extracted from records kept at the hospital at Ventnor during three years, may be of interest:—

In 1873	the weight gained by	180	patients	was	731½	lbs.	
In 1874	„	„	233	„	„	857	„
In 1875	„	„	343	„	„	1260	„

Constipation will not unfrequently be a source of trouble to patients when they first settle in the Undercliff, as, indeed, is the case at many seaside places. The water supplied for domestic purposes at Ventnor is admitted by scientific experts to be one of the purest waters known in Great Britain. It is, however, a hard water, and no doubt contributes to the tendency now referred to. The constipation is generally no more than can be overcome by a prudent regulation of the diet. It is only necessary to draw attention, in passing, to the importance of watching the proper performance of the intestinal functions in the treatment of such conditions as the dyspnœa of asthma and the hæmoptysis of phthisis. The condition we have been considering is not, however, at all times

a source of trouble; occasionally, indeed, distinctly the opposite. This is seen in relation to the tendency to diarrhœa found in some diseases. Diarrhœa is far from being a frequent occurrence in the Undercliff, and even that of advanced phthisis does not appear to be so intractable as is found in some places.

Bilious Attacks.—Before leaving the derangements of the digestive system, and as a sequel to the preceding paragraph, it may be noted that some patients find their progress embarrassed, and from time to time seriously interrupted, by disorders of the hepatic functions. It is well known that sea-air often produces biliousness in those who are accustomed to live inland. It cannot, therefore, be remarkable that this should sometimes be the case at Ventnor, where, as has been explained, the atmosphere is typically a sea-air. This is especially found to be the case on the lower levels, the air there being strongly impregnated with the marine element. These derangements take the shape of imperfectly developed bilious attacks. Constipation is followed by a torpid state of liver, nausea, loss of appetite, a coated tongue, perhaps even slight jaundice, and great depression. The attacks are apt to return almost periodically. When such persons are not relieved by being ordered to live at as high an elevation above the sea as is possible in the Undercliff, by a rigorous readjustment of diet, and by suitable medicinal treatment, they should leave the district, and go in search of a more stimu-

lating climate. This matter is often an outcome of temperament, and hence admits of being, to some extent, judged of, and the patients advised, beforehand.

Eczema.—In connection with the subject of imperfect assimilation and derangements of the digestive organs, reference may be made to a condition to which such states predispose certain persons. And, besides its relation to these disorders, eczema is of some interest to us in its bearing upon certain forms of chronic bronchitis, from their mutual alliance with gout. In the more chronic and localized varieties of eczema, the climate of the Undercliff seems to exert neither a helpful nor a harmful influence. Such patients do not grow worse here with regard to the skin-affection ; on the other hand, they do not readily lose it under treatment. The case is different in the acute and more extensive forms of the disease ; for it must be admitted that persons suffering in this way will not find the condition rendered less troublesome by coming to the Undercliff, but rather more so. When the approach to an acute attack of eczema begins in an individual who is a resident in the district, it will frequently be necessary for him to seek a change of climate, for a time, before much improvement takes place.

Chronic Bright's Disease.—It is a well-recognized fact that the prognosis in some forms of Bright's disease largely depends upon the amount of care and

prudence with which the patients devote themselves to the management of their health. If they can be prevailed upon to realize their invalided position, life may often be maintained for many years. A very important adjunct in this is that the patient should avoid exposure, and shun every condition likely to impede the compensatory action of other organs. Residence in a sheltered climate is generally very useful by promoting a free, perhaps an increased, elimination through the skin, and by averting such complications as bronchial catarrh. The equability and comparative warmth found in the Undercliff have rendered great assistance to some of these cases, especially to some of the subjects of granular degeneration of the kidneys.

Affections of the Heart.—In the course of every year, a great many visitors come to the Undercliff labouring under affections of the heart, either simple or complicated with pulmonary troubles. Many of them are benefited by the mildness of the climate and the quiet life of the place. It is necessary for the patients to exercise discretion, however, or harm rather than good may be received. Many of the roads in the neighbourhood are far too hilly for them, and it must be remembered that over-exertion of this kind is strongly to be deprecated in cardiac cases. The breathlessness here differs from the breathlessness from lung-diseases in that, in the subjects of heart affections pure and simple, there is no obstruction to

respiration. The breathing is untroubled except on exertion, and no exertion is worse than hill-climbing. As sufferers from disease of the heart are often singularly spirited and brisk in their energies, they require a clear warning on this point. But if they can be persuaded to keep on one level, and ride or drive when hilly ground is to be traversed, a very great amount of benefit will accrue from the equability of the climate of the Undercliff, without any drawbacks form the precipitous situation. The bronchial catarrh, nearly always present to some extent in such cases, decidedly benefits from the climate.

Catarrhs.—There are persons of all ages, the very young not excepted, who become prone to the easy recurrence of catarrh, even without any permanent morbid action having been developed in the chest. Such persons are often greatly benefited by a winter spent at Ventnor. Even if complete freedom is not secured from the attacks, although with prudence this ought to be accomplished, the fresh catarrhs tend to run a milder course; and, when the patient is convalescent again, he is not long detained indoors. This last point is generally one of great difficulty. In less sheltered climates than that of the Undercliff, a patient who has been confined to the house by one of his attacks, even for a week or two, finds it is quite a problem how to pass safely again into his regular habits of outdoor exercise. A patient does not find

himself in this dilemma at Ventnor, and his general health reaps a corresponding advantage, the consequence being a diminished susceptibility to the attacks.

Anæmia.—Life in the open air and in the sunbeams is essential to recovery from anæmia. In no place in the kingdom can this be more continuously followed out than at Ventnor. The amount of sunshine, and the way in which the great southern slope of land forming the Undercliff is fully exposed to the sun's rays, have already been commented on. The sunshine and the pure sea-air together have restored many an anæmic person. These patients are generally women, and in those I have seen the condition has been a consequence of lactation, amenorrhœa, or similar derangements or excesses of function. The improvement has been as rapid and complete as could have been desired.

Scrofula.—In no disease is a change to a genial climate at the seaside more to be recommended than in scrofula. My connection with the Convalescent Home of the Royal Hants County Hospital, at Bonchurch, has enabled me to see how beneficial a residence there has been to strumous children with glandular abscesses, ear discharges, weak spines, eruptions, and other exhibitions of the scrofulous state. Almost without exception, the patients have left the island in a greatly improved state of health. In some of the more obstinate cases of spinal and joint disease,

considerable amendment has taken place in the general health. Many of these patients were under treatment during the summer, and had the additional advantage of sea-bathing. The Undercliff certainly deserves to be more utilized in such cases than it has hitherto been. Scores of delicate children might there obtain a fresh foothold on life.

Rheumatism and Gout are among the affections which ought to be referred to in these pages. Rheumatism is not a common disease in the Undercliff. In the acute form it is relatively more frequent, in my experience, in the part of the island outside the limits of this district; that is to say, in parts less sheltered. Many patients who have sought protection at Ventnor, after being debilitated by attacks of rheumatism, have convalesced rapidly, and have suffered no relapse. On the whole, the climate appears to be more useful in rheumatism than in gout, except those cases of atonic gout where cold is badly borne.

CHAPTER X.

CONCLUDING REMARKS.

We are now approaching the completion of our task. The preceding pages have been devoted to the consideration of Ventnor and the Undercliff as a wintering station, with especial reference to the requirements of sufferers from chronic pulmonary diseases. We began by taking a brief survey of the climatic and other advantages claimed by this favoured locality; and we have passed in review, as fully and impartially as we could, the chief pulmonary affections to which the climate is and is not adapted. Let us turn our attention to a few general points by way of conclusion.

It has been said that it is especially as a winter health-resort that attention has been called to Ventnor and the Undercliff. This winter season may be set down as commencing during October and as lasting till the end of May. Seeing of what consequence it is that invalids should begin the winter well, it is of importance that they should be settled in their winter quarters in good time. The end of May will be about the time for leaving, but it will be necessary to be

guided by the forwardness of the particular season, the part of the country to which the patient is going, and other similar details.

We are not at present concerned with the Undercliff as a place of summer resort, because, in the height of summer, sufferers from pulmonary affections are probably better away from the locality. Although the climate during the three summer months is very far from being so warm as is generally thought, these invalids should seek a cooler and more bracing air then. The first advantage of this step will be the acquisition of distinct benefit to the health from the change; in the second place, it will be the best preparation for profiting by the sheltered climate on their return to it for the succeeding winter. This second point implies that more than one winter should be spent in a protected health-resort. With regard to many forms of consumption, to chronic bronchitis, and perhaps to asthma, this is undoubtedly quite true. These diseases, as a rule, run a long course; and to withdraw anything in treatment which is acting beneficially, climate not excepted, is to commit a great error. Time must be given for remedial processes to tell. The effects of climate upon chronic disease are, it must be recollected, oftentimes slow to manifest themselves—a fact, indeed, in keeping with the effects of other agencies employed in treatment. Initial progress is slow in all chronic maladies.

At the same time, it is desirable not to make too

much of the usefulness of climate in treatment. Patients are to be warned not to regard the breathing of a certain atmosphere as if it were the inhalation of so much medicated vapour laden with therapeutic virtues. The resort to an improved climate is mainly of value because it secures for the invalid certain advantages, under which he may more profitably follow out his other treatment and, if possible, work out his recovery. The patient who has hope and perseverance, and is really in earnest, will pursue, under this fresh advantage and with renewed energy, everything that is capable of influencing his case for good. He must neither throw off any of his precautions nor abandon a single item of his treatment. This is a subject which requires to be pressed with some degree of persistency, because people are often willing to depute to climate duties which, in point of fact, devolve properly upon their own individual efforts. In case of failure, it is not uncommon to hear them, in the midst of loud lamentations, casting blame upon climate for the non-achievement of results of which, alone and unaided, it is absolutely incapable. I am referring at this moment to sins of omission. But the medical practitioners in our health-resorts have often to deplore the effects of their patients' sins of commission—the sunny morning wasted in a smoky billiard-room, the wilful evening stroll, the foolish walk on a stormy day, or the injudicious drive in the teeth of an east wind. Want of success, then, is not

seldom due to deficiency of patience, of perseverance, or of prudence, in the sufferers themselves. A patient's chances of recovery are also appreciably lessened when there is that lack of diligence begotten of want of hope and confidence, or where there is an impulsive temperament, often one of the greatest difficulties with which a medical man has to contend.

It is worth while mentioning that the progress of patients is, to some extent, more in some than others, also influenced by the surroundings in which they are placed, and by their mode of life. It is by no means always a matter of indifference whether they are in congenial society or whether they are separated or not from family or friends. Nor is it immaterial to a patient's chance of recovery whether he is happy and cheerful in the absence from home, or whether he is provided with interests and inducements for outdoor exercise. But these are matters which need only be hinted at.

Those who have newly arrived in the Undercliff have often to pass through, as is the case at many other places, a kind of acclimatization. It is well to mention this fact, because altered feelings are apt to be at once construed into a disagreement between the state of health and the climate, when in reality they only signify that this process of acclimatization, which will pass away in a few days, is in progress. These trifling signs are more often noticeable in persons who have come to Ventnor from far distant places. On

the other hand, it is a matter of experience that these are they who feel most the shelter of the Undercliff, and who benefit the most by it after a little time. If the feelings persist, it is advisable that a different house or level should be sought; but if they do not wear off in a few weeks, then it is undesirable that the patients should remain here. It may, however, be once more pointed out that the town of Ventnor being built in a series of terraces, ranging from the sea-shore to a considerable height, there are few patients to whom its climate is not adapted. On the Esplanade itself, within a few yards of the English Channel, and a few feet above the sea-level, there are excellent houses. Nor is it otherwise on the higher terraces. Every elevation has its value; and ample and good accommodation is readily to be had, along with, in most cases, both kind and experienced attendance on the part of the proprietors.

But to whatever climate or resort a patient is sent, and however well it may be adapted to his case, he will sometimes after an interval cease to make headway. The cause of this must be carefully sought out, and if necessary a change, not of dwelling merely, but to another health-resort, should be advised. This change should be, as a rule, to another winter station, as near as possible, both in climate and in distance, to that which he is leaving. It may only require to be a change of short duration. If well managed, however, it will often happen that a new period of

improvement will be inaugurated, and time of immense value to the patient will not be spent in merely maintaining a *status quo*.

There is another question which one has unfortunately to face from time to time. It is to decide whether a given patient ought to stay if he be distinctly growing worse. This will be a matter for very careful attention. It is unnecessary in this place to enlarge upon the points which would guide us in giving an answer; but it will depend upon such considerations as the following:—the form and duration of the disease; the cause of the increase of the symptoms; the stage and extent to which the disease has reached; the patient's general condition; the alternative climate that the patient has before him at home or elsewhere; and the time of year. All of these, and sometimes more, must be taken gravely into consideration before judging in which direction the greatest advantage lies for the patient.

In concluding these remarks upon the climate of the Undercliff of the Isle of Wight, let me disclaim all desire or intention to exalt that district at the expense of other health-resorts. There are many sheltered spots at home and abroad with climates available for the treatment of disorders of the respiratory organs. Some of these climates are no doubt superior to others, but not even the best is suitable for all forms of chest-disease. My object has not been to overpraise one place or to disparage another. It has been, on the

contrary, to endeavour to bring out more clearly the conditions in which the Undercliff, as a winter climate, is likely to be of use. I am quite conscious of the very limited extent of my contribution, but it is offered upon a matter relative to which, so far as the Undercliff is concerned, systematic accounts appeared to be wanting.

THE END.

Wellcome Library
for the History
and Understanding
of Medicine

LONDON: PRINTED BY WILLIAM CLOWES AND SONS, LIMITED,
STAMFORD STREET AND CHARING CROSS.

WELLCOME
LIBRARY

ey Dunn & Wilson Ltd
ERT CONSERVATORS & BOOKBINDERS